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

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Unsolicited article manuscripts, research notes, book reviews, and points of interest are welcome. Articles should be 5000-7000 words exclusive of endnotes, research notes 1500-2500 words exclusive of endnotes, book review essays and reviews 500-1000 words, and points of interest 1000 words or less. Articles may be submitted in either official language. Authors must include a brief biography. Authors must supply any supporting tables, charts, maps, and images, and these should not be embedded in the article text. Articles may be submitted via email or regular mail. All submissions are peer reviewed and the Editor will notify contributors on the status of their submission. Further details regarding author submission guidelines are available at http://www.army.forces.gc.ca/caj/.

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EDITORIAL—MANOEUVRING PAST MANOEUVRE

Major Andrew B. Godefroy, CD, Ph.D.

Almost a quarter century ago a pair of writers penned a short thought-provoking article in the pages of the now defunct journal, *Canadian Defence Quarterly*, titled, "On 'Home-Grown' Strategic Thought".[1] Published at a time when the United States Army and other western allies were re-embracing the classical writings of Jomini and von Clausewitz, authors Christian Jaekl and David Bellamy astutely observed how the creation or adoption of a 'strategic thinker' may not always be needed or even desirable. As a participant in the multi-nation military alliance NATO, as well as a supporting actor in its Central Army Group (CENTAG) during the latter decades of the Cold War, one can easily see how it may have mattered less whether or not the Canadian Army pursued or created a unique way of warfare. As American historian Russell F. Weigley noted a decade earlier, countries not immediately imperilled by foreign enemies and jealous of the standing armies of its neighbours were better to focus on the 'nuts and bolts' of its own theory, history and tactical innovation. Appropriate reflections of strategy from this evolution could be drawn at a later or more necessary time.[2]

Though Canada never produced its own version of Sun Tzu, it was fortunate to have in the ranks of its army a number of soldiers firmly committed to the study of military strategy, tactics, concepts and doctrine. Perhaps the first of these notable thinkers and writers was George Taylor Denison III, the high profile commanding officer of the Governor General's Body Guard who had seen service during the 1866 Fenian Raids as well as the 1885 Northwest Rebellion. A staunch Canadian loyalist and protagonist, he wrote dozens of publications on Canadian defence as well as numerous works on the organization and employment of cavalry. Going against the grain of many of his Imperial and colonial peers, he was a strong advocate for the employment of mounted infantry based on his close study of the U.S. Civil War. Denison's 1877 study on the history and future employment of cavalry in war won international praise, prize money, and was translated into several languages.[3]

Other thinkers and writers followed. During the latter Victorian era a number of graduates of the Royal Military College in Kingston, Ontario went on to serve with the British Army at various outposts across the empire. One such graduate, William Charles Gifford Heneker of Sherbrooke, Quebec, served in several campaigns in West Africa conducting everything from peacetime military engagement to major combat operations. In 1907 he wrote a book titled *Bush Warfare*, a classic study on small wars and counter-insurgency that formed part of the triad of doctrinal 'bibles' employed by the British Army well into the 1930s.

During the First World War, the Canadian Expeditionary Force earned a considerable reputation for tactical innovation, much of which was discussed and debated in the pages of the original publication of the *Canadian Defence Quarterly* right up until the beginning of the Second World War. Following that terrible conflict, the pages of the Canadian Army Journal focused heavily on the tactics of both the arctic as well as the atomic battlefields. Even when the army became entrenched within the doctrinal confines of AirLand Battle (ALB) and Follow On Force Attack (FOFA) in the

1970s and 1980s, it continued to think and write about the 'nuts and bolts' that would be required to achieve success on the modern battlefield.

During the latter stage of the Cold War, the conceptual and doctrinal challenge was to figure out how to simultaneously disperse to avoid nuclear blast and concentrate to effectively resist a Soviet armoured thrust through the Forward Edge of the Battle Area (FEBA). Today, adaptive dispersed operations (ADO), in what is rapidly becoming the post-manoeuvrist era of warfare, poses the challenge of being able to rapidly disperse to avoid as well as meet diverse threats, while being able to aggregate and concentrate as needed to either fix, strike, or even assist. It is a new tactical problem, but it is still largely a 'nuts and bolts' problem—and the Canadian Army has a tremendous legacy of taking on and beating such challenges.

This issue of *The Canadian Army Journal* contains a number of challenges to existing concepts, designs, doctrines, and tactics. In addition to the conclusion of LCol Jayne's analysis of the future of airborne forces, Captain French undertakes a very timely review of the 'doctrine and lessons' of prison breaks while Major Matsalla and Sergeant Grant challenge existing approaches to sustainment and territorial defence respectively. Mr. Curtis undertakes a meticulous investigation of the army's application of the effects-based operations (EBO) construct, while LCol McCulloch reopens the issues surrounding the organization and employment of the Canadian Machine Gun Corps. Supported by some very interesting notes to file and issues in the stand-up table, the journal is completed with a number of in-depth book reviews. As always, enjoy the issue and we look forward to hearing from you.

HONOURS AND RECOGNITION

The three military valour decorations, namely the Victoria Cross, the Star of Military Valour and the Medal of Military Valour, were created by Her Majesty Queen Elizabeth II, Queen of Canada, on January 1, 1993. The Decorations may be awarded posthumously. The Victoria Cross is awarded for the most conspicuous bravery, a daring or pre eminent act of valour or self-sacrifice, or extreme devotion to duty, in the presence of the enemy. The Star of Military Valour is awarded for distinguished and valiant service in the presence of the enemy. The Medal of Military Valour is awarded for an act of valour or devotion to duty in the presence of the enemy.

On 4 June 2008 Her Excellency the Right Honourable Michaëlle Jean, Governor General and Commander-in-Chief of Canada, announced the awarding of 12 Medals of Military Valour to members of the Canadian Army who displayed gallantry and devotion to duty in combat.

CITATIONS

MILITARY VALOUR DECORATIONS
Medal of Military Valour

Corporal Michel Beaulieu, M.M.V.
Ville de La Baie, Valcartier and Québec, Quebec
Medal of Military Valour

Corporal Beaulieu was the gunner on board a light armoured vehicle when, on October 5, 2007, during a combat logistic patrol in Afghanistan, the vehicle was severely damaged by an explosive device. Although he was injured and under sustained enemy fire, Corporal Beaulieu dismounted the vehicle and manually engaged the enemy, exposing himself to great peril. His heroic actions contributed to neutralizing the insurgents and saved the lives of many members of his platoon.

Captain Joseph Maurice Jocelyn Bordeleau, M.M.V., CD
Québec and Sainte-Catherine-de-la-Jacques-Cartier, Quebec
Medal of Military Valour

On September 25, 2007, while under enemy fire in Afghanistan, Captain Bordeleau expertly directed the intervention of the Quick Reaction Force while administering first aid to a critically wounded soldier. In addition to demonstrating leadership and control, Captain Bordeleau's actions saved the life of a fellow soldier.

Corporal Yan Dodier, M.M.V.
Québec and Magog, Quebec
Medal of Military Valour

Corporal Dodier was deployed with B Company, 3rd Battalion, Royal 22e Régiment, in the volatile district of Zharey, in Afghanistan. On November 17, 2007, during an ongoing combat operation, he selflessly drew enemy fire to his position, allowing the members of his platoon to suppress the enemy, which had surrounded and trapped them for several hours.

Master Corporal Érik Dubois, M.M.V.
Valcartier, Shannon and Pierrefonds, Quebec
Medal of Military Valour

On September 27, 2007, despite being wounded during a combat operation, Master Corporal Dubois carried, on his back, a critically wounded comrade over 150 metres of difficult terrain. In addition to assisting the soldier, his actions also enabled the safe withdrawal of his platoon from an enemy kill zone in Afghanistan.

Sergeant Stéphane Girard, M.M.V., CD
Valcartier, Saint-Jean-Chrysostome and Magpie, Quebec
Medal of Military Valour

On October 10, 2007, Sergeant Girard demonstrated leadership and dedication as a mentor to the Afghan National Army. He selflessly exposed himself to enemy fire to better direct the advancing Afghan soldiers, enabling them to take control of a perilous situation and complete their assigned mission.

Warrant Officer Joseph Yves Léon Gonneville, M.M.V., CD
Valcartier and St-Tite, Quebec
Medal of Military Valour

On October 23, 2007, during a complex combat operation in the district of Zharey, Warrant Officer Gonneville evacuated two wounded soldiers while under intense fire, and helped to successfully repel a determined enemy as a member of the Operational Mentor and Liaison team, in Afghanistan.

Warrant Officer Joseph Jacques Stéphane Grenier, M.M.V., CD
Valcartier, Shannon and Saint-Ligouri, Quebec
Medal of Military Valour

Warrant Officer Grenier, then Sergeant, distinguished himself by his valiant conduct under intense fire, when his section was ambushed, in Afghanistan, on September 27, 2007. He selflessly exposed himself to great peril when he engaged the enemy to rescue and evacuate two wounded soldiers, all the while coordinating the tactical withdrawal of his troops. His immediate actions contributed to saving numerous lives.

Warrant Officer Joseph Mario Sylvain Isabelle, M.M.V., C.D.
Valcartier, Shannon and Lac-Mégantic, Quebec
Medal of Military Valour

On September 24, 2007, during a combat operation in Afghanistan, Warrant Officer Isabelle provided life-saving first aid to seriously injured crewmates after their vehicle was destroyed by an enemy strike. Despite being seriously wounded and completely exposed to enemy fire, he led the successful evacuation of his injured platoon members while directing a counterattack against the insurgents.

Major Michel Louis Lapointe, M.M.V., M.S.M., C.D.
Ottawa, Ontario, Valcartier and Shawinigan-Sud, Quebec
Medal of Military Valour

On September 25, 2007, Major Lapointe demonstrated remarkable leadership and courage. He inspired his troops, as well as the members of the Afghan National Police under his command, by quickly forming an ad hoc intervention force to counter a well-coordinated ambush by insurgent forces.

Corporal Edward R.G. Morley, M.M.V.
Edmonton, Alberta and Hamilton, Ontario
Medal of Military Valour

On September 24, 2007, during a combat operation in Afghanistan, Corporal Morley left his own armoured vehicle to provide first aid to a critically wounded soldier until evacuation was possible. Under the threat of the enemy, he reacted courageously to ensure the survival of a comrade.

Corporal Erik Poelzer, M.M.V.
Edmonton, St. Albert and Hinton, Alberta
Medal of Military Valour

On September 24, 2007, during a combat operation in Afghanistan, Corporal Poelzer demonstrated courage and exceptional technical skills by coordinating a vehicle recovery effort through hours of sustained enemy attacks. He continuously exposed himself to great risk while preventing a vital piece of equipment from falling into enemy hands.

Captain Joseph Hughes Stéphane Tremblay, M.M.V., CD
Valcartier, Alma and Shannon, Quebec
Medal of Military Valour

Acting as a mentor to the Afghan National Army during his deployment, Captain Tremblay, then Lieutenant, led Afghan soldiers during a combat operation on September 8, 2007, under enemy fire. His leadership and courage inspired his troops to bring the mission to its successful completion.

THE SARPOSA PRISON BREAK

Captain Nils N. French

At roughly 2130 hrs on Friday June 13th, Taliban fighters executed a raid on Kandahar's Sarposa prison. The operation began when a large truck loaded with explosives was used to destroy the prison's main gate. An individual wearing an explosive vest later destroyed a portion of another barrier. Following the explosions, at least 30 Taliban fighters, on motorcycles surged into the prison in a hail of RPG and small arms fire, killing at least nine of the prison's Afghan security staff.[1] According to Taliban claims, a number of roadblocks were emplaced just prior to the jail break to prevent interference from security forces.[2] Approximately 1,100 prisoners, as many as 400 of them Taliban fighters,[3] escaped on foot into the surrounding orchards and into a fleet of minibuses that were standing by. Within days, Taliban fighters and some of the new escapees moved north into the fertile Arghandab district; supposedly occupying several villages,[4] destroying bridges, and mining roads leading into the area.[5] First completing a search of the Kandahar City that located roughly twenty escapees, Afghan and NATO forces next moved quickly to mount an offensive into the area and regain control. At time of writing, an estimated one hundred fighters have been killed or captured in the operation and the remainder are suspected of having moved north into rougher terrain.[6]

A Closer Look

The nature of the attack suggests that preparation likely started several months prior to the actual event. Of particular note was a well publicized hunger strike undertaken by several of the Taliban detainees in May. The strike was to protest against alleged instances of torture within the prison and in some instances prisoners had sewn their mouths shut to demonstrate their commitment. As there have been reports that the detainees in the prison were communicating by cellular phone with others outside to coordinate the attack,[7] the hunger strike may have been conducted with a view to building support within the community for the upcoming escape.[8]

Such support would have been necessary. Analysis of the blast site indicates that roughly two tonnes of home-made explosives were used in the attack[9] and consideration of the numbers required to make the bomb, assemble a 30-man motorcycle assault force, gain access to several minibuses, man the exfiltration team and handle the establishment of a cordon of roadblocks in the surrounding area would suggest that more than 100 people were required overall. Given the scope, significant degrees of support and acquiescence may have been required to covertly prepare and stage the equipment for the attack as well and infiltrate the fighters into the area undetected. A degree of sympathy (and likely coercion) would also help explain the rapid dispersal of the escapees into the city and surrounding region afterwards, including the exfiltration of a dozen or so escapees that were reported to have escaped into Pakistan within 24 hours of the event.[10]

As is to be expected in Afghanistan, a degree of insider involvement is likely. This may have been used to ensure the arrival of the water truck carrying the explosives coincided with an actual scheduled visit,[11] that a minimum number of security personnel were present, and that other arrangements were made to increase the success of the operation.

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Characteristics of Sarposa may have played an element in its selection as a target for the operation. First, it is widely known that there have been numerous inevitable challenges in developing Afghan security forces. These are the forces that were guarding the prison and, given a number of competing priorities, they were also limited in number. Second, and as has been brought to light in the Canadian press, the prison

seems to have presented physical weaknesses from a security standpoint. In particular, the chief corrections officer in Kandahar recommended that the first priority at Sarposa be on securing the perimeter of the institution in February of 2007.[12] Although funding for reconstruction is limited and there are numerous competing projects and priorities in the area, it is to be noted that roughly $1.5 million has been spent to improve the prison. It would seem, however, that such expenditures are relatively minor when compared to the $20 million that was spent expanding Pol-i-Charki prison outside of Kabul[13] or expenditures used to secure the prison at Bagram airbase. Another factor is the location of the prison relative to the NATO base at Kandahar airfield, which is more than 30 minutes away with Kandahar City located between the two. It is likely that those planning the raid were aware of the above factors.

Insurgent Prison Breaks: A Brief History

Prison breaks have been used as an insurgent tactic on other occasions. Examples from the last few years include the release of 23 prisoners from a jail in Yemen in February of 2006,[14] 33 prisoners from a prison in Muqdadiyah, Iraq in March of 2006,[15] 49 prisoners from a prison in Cotabato, Philippines in February of 2007,[16] and 300 freed from a facility in Chattisgarh, India in December, 2007.[17]

Although it was unsuccessful, an April 2005 attack mounted on Abu Ghraib prison in Iraq was conducted in a manner similar to Sarposa: the use of preliminary rocket attacks elsewhere to draw attention away from the event, the conduct of the attack under the cover of darkness, the detonation of two large suicide bombs (including vehicle-borne devices) used in an attempt to breach the main gate, and the involvement of several dozen insurgents with rocket-propelled grenades (RPGs) and other light weapons. At the time, Abu Ghraib was guarded by a company of US Marines. The defending force did sustain casualties, but none of the prisoners escaped.[18]

With the exception of the event in India, all of these were conducted by either al Qaeda directly or by organizations in some way linked to the global organization. In this instance, the link between al Qaeda and the Taliban, which brought the Canadian Forces

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to Afghanistan to begin with, may have been a key element in the planning and execution of the attack. As Kandahar Governor Asadullah Khalid has indicated, the attack was too sophisticated to have been carried out by local insurgents.[19]

Stratfor, a US-based strategic analysis group, has noted that both al Qaeda and jihadists in general place an emphasis on freeing their captured comrades.[20] On the part of al Qaeda this likely relates, in some way, to the organization's top two leaders having both been imprisoned themselves. Bin Laden was held under house arrest by the Saudi government during the First Gulf War and Ayman al-Zawahiri was imprisoned and brutally tortured in Egypt following the assassination of President Anwar El Sadat.

Sheikh Omar Abdul-Rahman, commonly referred to as 'the Blind Sheikh,' is another example of this emphasis on freeing captured allies. He is known to have planned and even conducted surveillance of a prison in New York with a view to freeing a member of his organization that was to be tried for murder. Although not carried out, a truck bombing followed by an armed assault was the basis of his plan.[21]

Events of this type have also occurred in Afghanistan. January of 2006 saw the escape of seven Taliban fighters from the Pol-i-Charki prison near Kabul (a complex that was actually seized by the Taliban in 1996[22]) and October of 2005 saw the escape of 'the Bagram Four' from the heavily guarded prison at Bagram Airbase.[23] Even Sarposa prison itself has had this happen before: in October of 2003 there was an escape of 41 Taliban prisoners through a tunnel dug underneath the complex.[24] Furthermore, a massive explosion involving a propane tanker at Pol-i-Charki earlier in June of this year may have been a failed prison break attempt.[25]

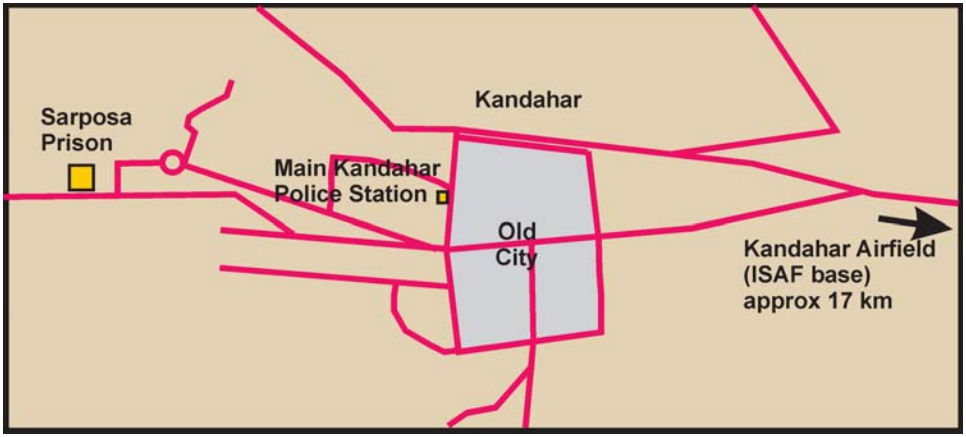
Other insurgencies have had their share of similar operations, but a full list will not be included here. In fact, the addition of IRA prison breaks would add roughly a dozen more. Although no two prison breaks are the same, certain common elements underlie all of them and they will likely remain an insurgent tactic in the years to come.

Possible Effects

To date, some domestic comments in the media initially referred to the Sarposa prison break as a setback that will not raise the threat level to soldiers in theatre nor bring about any likely strategic impact. Commanders on the ground have more accurately expressed the possible threat increase that may result and have communicated plans to respond accordingly. While there is a reasonable possibility that the event can be mitigated so that only minor problems arise, there may still be a possibility for effects worthy of consideration.

First, Sarposa quite possibly held the largest prison population in Afghanistan, nearly twice that of the facility at Bagram Airbase. In numbers alone, the attack may have significance. It has also been stressed in the media that only a portion of the escaped prisoners were Taliban. This may be true, but those that were not members of the Taliban when incarcerated now owe the organization for their escape. Another possible concern is that, as fugitives, they will not easily be able to seek legal employment and may be forced to consider joining the insurgency as one of the few viable options. The escapees may temper the will to fight amongst other insurgents and also attempt to turn the local population against the government by relaying accounts of torture and other mistreatment (true or not). It is also to be considered that a number of the escapees, if allegations of torture and mistreatment are valid, may be motivated by revenge.

Colin Kenny, Head of the Canadian Senate Commission on Security and National Defence has stated that the Taliban has achieved a moral boost in that the break tells



current and would-be militants that even if they are captured, "we'll get you out."[26] This may be accurate. Other victories on the moral plane include the significance of a success so close to one of ISAF's largest bases and against a significant symbol of government. The attack may also leave the local population with less confidence in the capacity of coalition and local forces to protect them from not only the Taliban, but from common criminals as well.

There are, however, some positive aspects that have arisen as result of the incident. To date, NATO has played the IO game well and has carefully addressed the event itself and the events that followed in Arghandab and other areas. With respect to the operation to push back and regain control of areas occupied following the escape, NATO and Afghan forces wisely avoided a Fallujah-like response to the clear provocation that ensued north of the Arghandab. The conduct of the operation is commendable when looked at from a counter-insurgency perspective. Evidence of this comes from Globe and Mail reporter Graeme Smith, who has been very forthcoming in reporting on heavy-handed tactics, civilian casualties, and collateral damage in recent years. Smith indicates that the push into the area north of Kandahar relied on "an influx of 1,400 Afghan soldiers instead of aerial bombings, and few civilian casualties were reported."[27] This approach represents a marked improvement and exactly what is required.

Also relevant, General Hillier is absolutely correct in his mention of the positive aspects represented by the expanded capacity of the Afghan Army as witnessed during the operation.[28] The mentoring and liaison teams deserve considerable credit for their gains at such a challenging task. It should also be mentioned, however, that there is a possibility the minimal defence mounted by the Taliban was, in part, a delay tactic designed to enable Taliban forces to escape into areas further north while Afghan and NATO forces carefully mounted the operation into the Taliban-held area.

Recommendations

From such a distance, it would be unreasonable to make any significant tactical comments on the event and its follow-on operations and an initial analysis does not suggest any major tactical recommendations regardless. It is reasonable to say that Sarposa was a vulnerable point, but it must be stressed that it was one of many vulnerable points in the area. It could be suggested that Canadian troops should have been defending the prison, but this is likely not an option under current Canadian policy and if the 2005 attack on Abu Ghraib (which almost resulted in a few escapes) gives any

suggestion, even a full company may have been insufficient. Thinking troop-to-task, a full company would represent a significant portion of coalition forces and would draw needed troops away from core missions.

It could also be said that physical security could have been more robust, but as has been mentioned, the prison was likely one of several competing reconstruction priorities in the area and the capacity for reconstruction is limited. It is also likely that the tendency of NATO and Canadian policymakers to avoid matters related to detainees has had an influence on how much funding was allocated to improve the facility.

As has been suggested by leaders in the media, better intelligence may have provided early warning. Ideally, such information should come through contacts within the local population, and depends on the numerous components of the practice of the counter-insurgency as a whole over several years. As a result, the intelligence component is too broad to be discussed in detail here. What deserves mention, however, is what seems to be a general shift in Kandahar from vehicle patrols toward foot patrols. This shift is suggested by recent deaths in theatre, most of which occurred dismounted. This is in line with counter-insurgency best practices and will, over time, improve intelligence significantly. The increased reluctance to use heavy weaponry as observed during the push into Arghandab is also a positive shift and will lead to similar gains over the long term. What seems to be an increased involvement of local forces will also bring positive gains.

If the Sarposa raid does offer any suggestions or points for improvement, these would be on the strategic end of the spectrum. The attack is actually just one of many problems related to the detainee issue, an issue that has seen the front pages of Canadian newspapers more frequently and caused more discussion than any single other, with human rights issues most prevalent. The solution may be a NATO move toward greater responsibility for detainees. At the same time or even without changes within NATO, Canada and the Canadian Forces may wish to consider a shift in policy toward accepting greater responsibility itself. This would require, at both the alliance and national levels, the development of an increased expertise in the military police branch, the operation (and fully-funded construction, if necessary) of our own detention facilities in theatre, and solid, current doctrine and policy on the matter. A certain point against such an approach is that local government and local forces will only learn if allowed to handle matters on their own. Sarposa may have suggested a need for more balance with respect to this idea. Perhaps a shift from mentors and observers from Corrections Canada to facilities well-staffed by specialized CF personnel with an expertise in corrections would be more reasonable. These experts would conduct a long right-seat-ride with local forces as competency rises to standard. There are certain legal challenges accompanying increased responsibility as well, this is certain, but as such a shift is in the interest of all involved, such challenges should be surmountable.

In terms of how things could be done and when dealing with insurgencies in particular, detainee facilities should resemble domestic correctional facilities where training, education, rehabilitation, and even amnesty are provided in conjunction with careful assessment of the prisoner in question. Vital throughout will be an approach that criminalizes insurgent activity in the public eye. This is the approach that the US military has started taking in Iraq and the results have been very promising, making detainee operations more of an enabler than a burden.

A shortage of resources is often one of the primary reasons suggested for a different approach having been taken by NATO and Canadian policymakers on the detainee issue. It seems, however, that Canada's own experience in Somalia and our observation of the incidents that unfolded within the walls of Abu Ghraib and the beating and death

of a detainee in British custody in Basra have brought about a certain resistance to the acceptance of what looks to be perceived as an unacceptable strategic risk. The same seems true of NATO. Sarposa may have shown that while there are risks that accompany a robust detainee program, there are also risks accompanying the more hands-off approach.

Conclusion

The recent history of insurgency has witnessed prison breaks and attempts will likely continue as insurgents work to free their comrades from facilities the world over. Sarposa may prove to produce some negative effects as time progresses, but there has been a positive aspect in that follow-on operations into Arghandab allowed Afghan troops to prove their competency and were done in a way that avoided a heavy-handed approach in favour of a stance more in tune with good counter-insurgency practice. While no solid tactical recommendations or points for improvement have been made here, a strategic-level shift in detainee policy has been recommended. Such a shift would not only improve the security of such facilities through more competent manning and increased funding for construction and maintenance, but would also help shed many of the human rights concerns that have been recently encountered. Manoeuvre commanders facing insurgencies are presented with and will always be presented with staggering challenges. The detainee issue should be addressed at the strategic level in such a way that they can rely on the matter to be fully resourced and managed by specially trained experts they can trust.

About the Author...

Captain Nils N. French, Canadian Military Engineers, is currently the Canadian Army Exchange Instructor to the US Army Engineer School at Fort Leonard Wood, Missouri. Captain French graduated from the Royal Military College of Canada in 2002 with a degree in Civil Engineering. He is currently completing a Masters of Military Studies in Unconventional Warfare from American Military University, focusing his studies on counter-insurgency. Over the past two years, Captain French has published work with the Pearson Peacekeeping Centre, Small Wars Journal, the Canadian Army Journal, and the US Army Engineer Professional Bulletin. He has also presented at symposiums of the Conference of Defence Associations Institute, the International Studies Association, and the Canadian Institute for International Affairs. He would like to thank Mrs. Sharon Swain of the Fort Leonard Wood Military Library for her assistance in researching this topic, Professor Geoff Shaw for his continued broad-spectrum thoughts, and a number of esteemed NATO colleagues for their input on detainee operations and the writing of the article in general.

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LESSONS LEARNED FROM THE USE OF TANKS IN ROTO 4

Captain Pascal Croteau

History

Capt Pascal Croteau

The complexity of the Zhari-Panjwai region of Afghanistan lends itself to infantry warfare. With its many compounds, its walls as high as towers, its narrow roads and marijuana fields, the role of tanks could have been limited to supporting convoys or taking up blocking positions on heights. Nevertheless, upon our arrival in theatre, we developed standard operating procedures (SOPs) and ways of doing things which have demonstrated their effectiveness during operations of ROTO 4. Using the long defile doctrine, the members of the battle group (BG) have developed excellent tactics, the execution of which varies from one operation to the next. Troop 32, to which I belong, has taken part in more than 20 planned operations and every time we have used the long defile technique, which we call here the road clearance package (RCP), and every time we have been able to advance safely toward the objectives while clearing the roads of improvised explosive devices (IEDs), thereby reducing the risk of rolling over explosive devices. The fact remains, however, that while these SOPs reduce the risks, they do not eliminate them entirely: straying from the path by just a few centimetres can prove fatal. Members of the companies (coys) and the squadron (sqn) have learned this lesson to their cost, as several vehicles have hit mines, even after the mine rollers and the Engineers have passed. As for the troop, it set off five IEDs with its mine clearing equipment during the mission. This paper is based primarily on the experience of my troop, but also draws on that of all members of C Sqn.

Photo Courtesy of Author

Village in Panjway District showing the complexity of the Afghan terrain (Dec 07)

Purpose of the Article

The aim of this article is to show how tanks can play a role and have an impact in complex terrain, and how we attempted to address the range of challenges that we encountered. After six months of operations, we compiled a number of observations, which will nonetheless come as a surprise to no one.

Movement of Tanks

The movement of tanks instantly prompts a reaction from the insurgents. Since we cannot conceal our movements, the insurgents know exactly where the combat teams (cbt tms) will strike and actively anticipate the final destination of our convoys. Since their advance warning network is quite effective, we had to find a way to cover our tracks: this is why tanks were used on several occasions as a diversion, as part of a deception plan or as bait. We carried out an operation with B Coy in October, which was a textbook example of success in this area. The following details are taken from my war diary:

> The plan divides the cbt tm into two groups, the first dismounted and the second mechanized, in order to clear the road. Two platoons (pls) plus the coy command post (CP) will set off on foot from the forward base during the night of _ October in order to take up observation and killing positions along the north-south axis of X Road, located less than _ km from the forward base. Once they are in position and have established observation of the choke points and the compounds, the mechanized group will set off from the forward base at around 0600 hrs and will establish a laager just north of R Road, at the intersection with X. The dismounted pls will then observe the advance warning network and the response of the Taliban in the area. Whenever the tanks move, the mere fact thereof automatically raises the insurgents' alert level and they begin to react to our movements. Once in laager formation, the Tp WO will install his mine rollers and the mechanized group will move south on X in the normal sequence of an RCP. A light armoured vehicle (LAV III) normally brings up the rear behind the last two tanks. The aim of the operation is to disrupt the insurgents, observe their advance warning network and the speed with which they can organize. The RCP will be merely a diversion, as we believe that the Taliban will think that we are clearing the road in preparation for establishing a police sub-station (PSS) or a checkpoint at intersection X and Y. As the RCP moves south, the dismounted elements will take steps to neutralize the enemy in order to really take him by surprise.
>
> Wake-up was at 0415 hrs in order to be ready to leave at 0600 hrs. The tank commanders came to the coy CP to receive a briefing on the status of the pls that had set off on foot the previous evening. Everything had gone off as planned and the pls were in an observation position ready for Phase II of the operation. We left the forward base at the scheduled time and established our laager as planned. The Tp WO installed his mine rolls and 40 minutes later we were ready to begin our RCP task. At 0730 hrs, the pl that was positioned farthest south began sending reports about enemy activity and the possible deployment of a dozen insurgents 300 m west of X Road. We believed that the Taliban concealed in the south had been warned of our approach and had accordingly attempted to set up mini-ambushes to catch us as they had done while C Coy was clearing a road. One thing was clear at that point: they had taken the bait and fallen into the trap that the cbt tm had set for them. They had no idea that they were being observed by infantry and were convinced that the RCP was moving south in order to secure the road and possibly establish a checkpoint. At around 0815 hrs, when a presumed Taliban commander (Comd) was standing up issuing his orders to his troops, who were hidden by vines, the South Pl Comd gave the order to his pl sniper to shoot at the individual. The Taliban leader was killed without his troops knowing where the

shot came from, because the sniper rifle was equipped with a silencer. A few seconds after the shot, the pl began to engage the insurgents with their pl weapons (C6, C9, C7, M203, M72) and called down a highly effective artillery fire mission on top of them. The Taliban responded with their light weapons and rocket-propelled grenades (RPGs). The tactical unmanned aerial vehicle (TUAV) reported that a group of insurgents were withdrawing to a compound farther west and by the time the artillery had engaged their position, they had time to launch additional RPGs onto the pl position. One soldier was wounded when an RPG hit the wall of the grape-drying hut from which he was firing. The section comd had some difficulty finding the soldier amid the dust, but finally found the casualty, who was quite dazed. The procedures for extracting the individual northwards were then begun and the company sergeant-major (CSM) took charge of the casualty, who continued northwards, where the ambulance was waiting for him. The same pl was then engaged from the south and the coy comd decided that the objective of disturbing the enemy had been more than achieved, and decided to begin the withdrawal northwards. It was all over by 1000 hrs and we were back at the forward base around 1115 hrs. During the battle, the RCP was in a defensive position on the road some 1.5 km to the north and we were assigned to cover the withdrawal of the dismounted elements. Intelligence reported that some 15 Taliban had been killed in the operation. The fish took the bait and we destabilized the insurgents.

Photo Courtesy of Author

T3 combat team awaiting H-Hour at the Mas'um Ghar forward operating base (FOB) (Sept 07)

This use of tanks clearly showed that we can not only protect the infantry and take part in direct actions, but also function as a diversion or as bait. If used properly, our SOPs and our routines can be employed to confuse and destabilize the enemy. This operation was a fine example of unconventional cooperation between tanks and infantry, since the plan called for the tanks to pass through a tunnel of infantry and not the reverse, as we are accustomed to doing. Without the presence of this tunnel, it would have been virtually impossible for us to move along X Road without the risk of coming under fire at very close range or even from buildings. Furthermore, our positioning of

vehicles in the RCP made it easy for us to escort the ambulance to the casualty collection point, since it was no longer in the rear echelon, as in the past, but with the lead troops. Thus, realizing that the movement of tanks was becoming a weakness because of the warning networks, the BG Comd decided to bring the tanks out more often and not only in kinetic operations. We may not be able to hide the movement, but we can certainly hide our intentions.

Single-file Formation

Another finding is that most mechanized movements must be carried out in single file and not in extended line in order to reduce the risk of hitting a mine or IED. The point is not that the tanks are reduced to this formation, since during those six months, we undertook blocking, occupation, clearing, feint and destroy missions, which required us to adopt several types of formation. Nevertheless, the terrain toward the objectives is generally very canalizing and is very risky for tanks on their own, as it requires line formation. Every movement must be carried out with dismounted engineers and infantry. Generally, a single troop of tanks is attached to the coy with an armoured recovery vehicle (ARV) and a truck to carry the mine rollers. In the event that the cbt tm is commanded by an armour branch major, an infantry pl will be attached to carry out the task. The cbt tms have the ability to break out across country and choose their routes; that, however, requires a planned procedure, which is extremely costly in financial terms, since the Coalition reimburses the farmers for the damage caused by breaching. Furthermore, this method is enormously counterproductive in terms of reconstruction and the moral victory amongst the local population, who turn against us once their fields have been ravaged by our mine ploughs and Badger armoured engineer vehicles (AEVs). The BG Comd, aware of the three-block war concept, accordingly ordered that all operations were to be carried out with minimum collateral and material damage, so that the local population would trust us and return to their homes as soon as possible. The tanks were accordingly confined to a single axis: this limits both their movement and the element of surprise and makes them more vulnerable to direct and indirect fire. It was therefore necessary to find a way of combining the tanks and the forces in order to counter-balance our loss of mobility and the lack of an element of surprise.

We therefore balanced our formation and increased our flexibility. The battle RCP consisted of a tank troop, a Badger, an inf pl, a combat engineer section and sometimes the infantry battle captain or cbt tm comd. The order of march of the vehicles behind the dismounted infantry is one tank with mine rollers or a mine plough in the lead, followed by a Badger, which ploughs the road and covers the space between the rolls, followed by the engineer section vehicle and the K9 (dog) team, an infantry section LAV, the troop comd's tank followed by the LAV belonging to the Cbt tm Comd and the rest of the RCP. The troop's tanks were accordingly dispersed throughout the cbt tm. We always made sure that we had one infantry or engineer section behind each tank and, contrary to our doctrine, the ambulance and the ARV were practically in the lead so that they could respond more quickly in the event of breakdowns or casualties. If the tank with the plough was not used up front, it preceded the ARV and the ambulance, and was able to make a road beside the column of vehicles and move forward more quickly. The echelon followed two or three km behind, under the control of the squadron sergeant-major (SSM) or the coy second-in-command (2I/C). The RCP used for non-kinetic operations (clearing a road for resupply) used the same formation, with the addition of the newly-purchased engineer vehicles, such as the Buffalo, Husky and Cougar (commonly known as the EROC suite) and involved only the RCP, the escort and the vehicles of the

echelon. Non-kinetic RCP was a tp or pl task and was accordingly commanded by one or the other, depending on the organization to which the task was assigned.

More specifically, the advance occurred as follows. In closed terrain, two infantry sections were positioned on either side of the road, at the head of the column, some 75 m from the first tank, advancing on the flanks. Behind them, the roller tank cleared the road, followed by the Badger. The two vehicles were followed by a dismounted engineer section on the road in an inverted "V" formation. Maintaining the distance between the dismounted personnel and the lead tank is crucial so that no one is wounded by shrapnel in the event of an explosion. Initially, we placed the engineer section on the flanks of the tank and, when the tank rolled over a mine in September, the explosion injured three people on the ground. Here, trial and error has consequences and we must be constantly analyzing and re-thinking how we do things. The engineers focus on the indicators that can reveal an IED or a mine, while the infantry makes sure that no triggerman, trip wires or Taliban are hiding in buildings, behind walls or behind marijuana plants. The RCP itself has a front 200-250 m wide by 500 m long.

Photo Courtesy of Author

The T32A roller tank during an operation in Zhari with R22eR B Coy (Oct 07)

The RCP is commanded by the tank troop leader, the infantry platoon comd or the sapper (engineer) troop comd. In case of doubt or if obstacles are encountered, the lead tank stops and launches into the famous Warning, Security, Recce, Plan and gives a description of the obstacle or suspicious location. The engineers then move forward and take care of the obstacle or the IED. In the event of contact, the dismounted troops respond with fire and withdraw behind the tank, and the pls begin the counterattack and dismounted manoeuvres under covering fire from the artillery and the tanks. Since we already have people on the ground and the force is well distributed, we are able to locate the enemy quickly and eliminate the threat with fire from the tanks, artillery and air assets. The tank remains the weapon of choice by virtue of its speed of action and its target acquisition capability. The gunners seek and find the insurgents very quickly. After a number of operations, cooperation between the elements is excellent and everything proceeds smoothly. Everyone knows his/her job and his/her place in the RCP and the

cbt tm. When the engineers go to work, the tankers keep quiet and follow, but the moment we come into contact is the one where the tanks and infantry take the floor. A cbt tm operation requires good knowledge of one's role and the humility to let others take over when the situation so requires.

Photo Courtesy of Author

Engineers advance to clear an obstacle during Op SARDIQ SARBAZ (Sept 07)

Protected Obstacles

The majority of the obstacles on the routes are under observation or under enemy fire. Frequently, obstacles usually consisting of wood, stone or old barbed wire are intended to slow us down and to make us deploy our dismounted troops. Thus, when we executed our drills, it gave enemy combatants more time to position themselves farther on along the axis of advance and ambush us. They also used places that were fairly easy to discover and obvious to the lead troops. Generally, well-hidden IEDs were positioned at the site of the main ambush, while readily noticeable obstacles were positioned so as to enable the enemy to gain time. Sometimes, they fired at us and took off toward a pre-determined position that was better protected where they launched their main attack. Since they are familiar with our rules of engagement, they know that if they are unarmed and if we have no Afghan National Army (ANA) soldiers with us, there is little danger of their being killed or captured. Since force protection is our priority, they also know that a single burst of small arms fire can immobilize a cbt tm for several minutes and thereby give them more time. We accordingly had to find a way of maintaining a good tempo, protecting the troops and creating a multitude of small breaches in obstacles while under small arms fire. The disposition of vehicles in our RCP, good battle preparation (tank commanders, section commanders and sappers talking to each other after the orders group), effective execution of drills and the use of TUAVs as a warning have provided a partial solution to our constraints, but there nonetheless remains some risk whenever dismounted people are advancing toward an obstacle or a tank turns around the corner of a wall. It was also necessary to slightly vary our sequences and procedures for breaching. Nevertheless, a tank (mine rollers or plough) and a Badger are always used first in the order of march behind the infantry in order to clear the road and, during contact, the tank is automatically used as a mobile

bunker for the dismounted personnel. After several joint operations, the infantry and engineers have often noted that they found the presence of the tanks reassuring and that when we were close to them, the enemy was more hesitant to launch its ambushes. The team is therefore more confident and projects professionalism and a confidence that may discourage certain Taliban[1] from attacking us.

Range Limitation

When channelled in defiles and surrounded by walls or marijuana fields three metres high, the tanks lose their ability to fire at a distance and to move the turret. Just sweeping arcs of fire without destroying all the walls is the greatest challenge for the crews. We simply used the Stab Elevation Override to allow the gunner to observe, but generally speaking, the Stab stays off and the tank commander aims the gun between the walls and the dwellings. We have noted that sweeping the arcs, even if the gunner can see nothing, frightens the insurgents and discourages them from firing on us. With the Leopard 2, we used the tank commander's periscope to observe when necessary. Since the barrel is approximately two metres longer than that of the Leopard C2, it was practically impossible to have the gunner constantly sweep the arcs. In some areas, the tanks are used more like bunkers for the dismounted troops than for their firepower. Nevertheless, in the event of contact, we did not hesitate to make room and expand our arcs of fire. In order to address the risks caused by lack of space, the crews had mounted their C8s on the turret (one pointing forward and one pointing backwards), with the tank commander's 9-mm on the hatch and they had two hand grenades ready for throwing. In spite of everything, the best defence for the tanks in closed terrain remains the presence of infantry on the ground and a LAV III behind them.

Photo Courtesy of Author

Tank T32C in close support of R22eR C Coy infantry and the ANA during Op SARDIQ SARBAZ (Sept 07)

For the troop, all our engagements have been at distances of between 75 and 600 m. We have had some engagements at over 1000 m, but they occurred while the tanks were in firing position at the forward observation base (FOB) or when we were conducting observation in support of the infantry coys. For instance, Troop 3 of the RCD killed two armed Taliban who were quietly smoking a cigarette on the north bank of the Arghandab River at 1,800 m and who were not in any way involved in the fighting on the south bank. Having observed them and having thereby confirmed that their intentions

were hostile, the troop requested authorization from the BG Comd and fired 105 mm HESH at the two individuals. However, when we advance in complex terrain, the Taliban hide at between 75 and 300 m and most of the time they fired at us before we were able to observe them. We could see them because of the smoke or flash from their weapons. They observed our guns and waited until we aim them in another direction to fire. The advent of the Leopard 2 and its independent periscope greatly enhanced our detection capability and reduced the number of hits on the tank. We also received the canister shell[2] at the end of our tour. Although we did not have a chance to try it in combat, we already know that it will discourage any attempt to hit us on the flanks at close range. Sometimes the insurgents launched a rocket from between two marijuana plants and disappeared. With a canister shell, we will be able to respond by firing in the direction from which the round came and kill or wound the hidden RPG crew. Following range trials, we have established that the lethal distance is approximately 400 m. The 120 mm HEAT rounds have produced excellent results in comparison to the 105 mm HESH round. The intensity of the shot from a Leopard 2 is a very important aspect of cooperation between ground troops and tanks. With the new tank, we constantly have to check our 45s before firing, and the rule about the second road wheel no longer applies. Dismounted personnel must be behind the tank, otherwise they will be hit by the concussion. Thus, the mixed use of tanks and infantry is the key to success in compensating for the limitations of our vision and our range in complex terrain. The advent of the Leopard 2 and its outstanding observation capability, in addition to the reduced exposure of the tank commander to enemy fire by virtue of his/her periscope and the view from his/her episcopes increased our target acquisition capability and enhanced our ability to fire first instead of merely responding. There is perhaps a parallel to be drawn between the advent of the Leopard 2 and the end of direct attacks against us as of December 2007.

Photo Courtesy of Author

The A6M Leopard 2 during an operation in Panjway District (Jan 08)

Vehicle Recovery

Lastly, one example of cooperation between infantry and tanks is undoubtedly vehicle recovery. Loss of mobility inevitably entails a risk of ambush and direct attack, as the combatants' attention is focussed on the vehicle and no longer on seeking out the

enemy. The LAV IIIs frequently break down or are caught in the waddis, and the advent of the tanks has vastly reduced the recovery time and the risk of ambush. The tanks and ARVs are capable of extricating a vehicle swiftly and effortlessly. The same is true when a vehicle hits an IED or when we are caught in an ambush; the more we reduce the time spent in the killing zone, the less we expose vulnerable troops. The tanks are able to push, pull and hitch very quickly, in addition to offering significant metal protection around ground troops engaged in repairs or in installing towing cables.

Photo Courtesy of Author

T32B tank in an observation position on a FOB (Nov 07)

Example of tank-infantry cooperation

To give you an idea of how an operation unfolds in complex terrain, here is another excerpt from my war diary following Op SARDIQ SARBAZ in the Panjwai area in September:

After a fairly quiet hour, the lead tank, the first in the RCP with its mine plough, came into contact when it was engaged with small arms and RPG fire. At virtually the same moment, the coy comd's LAV III hit a mine just behind the troop leader, who had just noticed a small red flag (marker) hung on a tree 100 m north of the road and who was attempting to pass on the information by radio. There was a cloud of dust and the sound of bursting tires all around. After the dust had settled, the troop leader feared the worst when he saw the LAV III at a 45-degree angle on the road, with three wheels missing. No one was seriously injured, although the crater was quite deep. The tp leader then asked his loader to take a look at the vehicle and suggest that we get it out of there and move it forward toward our final destination. After some discussion, the LAV III was hitched and pulled 300 m so it could be parked off the road. Everything was done very quickly, as we were still in contact at the front of the convoy and we could hear the bullets whistling above our heads. The road was very narrow and surrounded by fields of vines and marijuana plants (three metres high) with earthen walls at least four metres high in places. In short, it was the ideal place to ambush us and to limit the range of our weapons. The tp leader's tank knocked down a wall on its left to increase its vision and be able to respond to fire from that side. This was, however, to no avail, as the Taliban had disappeared. Once the situation had returned to normal, the lead tank reported on

the radio a second barbed wire obstacle across the road located in a blind corner. The engineers then moved forward to check whether the obstacle was mined, at which point they came under small arms fire. They withdrew behind the tank, which advanced toward the corner of the wall to protect them. At that point, it was hit full on the front of the turret by an RPG 7, fired by a group of gunners less than 200 m from the tank. The shrapnel shattered the gunner's main sight, but did not injure any of the crew. The tank engaged the Taliban with its secondary sight and killed one of them with a 105 mm HESH round. Once the situation had settled down, the convoy resumed its advance toward the objective. It was around 1200 hrs when the advance resumed.

Photo Courtesy of Author

A6M Leopard 2 tank of Troop T32 in movement in Panjway District (Dec 07)

700 m outside the village, the RCP again fell into an ambush from the south. The lead tank began to fire, as did the engineers and the ANA soldiers, who had just been deployed forward a few minutes previously. They began a flanking manoeuvre on the left under cover of the lead tank and the LAV III of a pl. At this point, the forward observation officer (FOO) mentioned that we had just obtained support from an F-16, which flew a pass and fired with its 20 mm canon. It took a tank firing a smoke shell into the grape drying hut for the pilot to finally attack the enemy position. Believing that he could be more useful forward, the troop leader positioned his tank in order to cover the entrance and the entire northern section of the village, while everyone concentrated on the attack south of the road. At that point his gunner noticed a head behind a wall in the village. The Capt confirmed the presence of the individual by observing from beside the tank commander, and they noticed that the individual had an RPG on his shoulder. He raised his head to confirm that no one was in the danger area of the gun and gave the order to fire. The RPG gunner fired at the same moment and missed the tank, while the 105 mm shell hit the target, creating a cloud of dust. The crew were jubilant and their enthusiasm could be heard while the troop leader sent the famous: "Contact coordinate 2 _ _ _ _ _ RPG crew engaged and destroyed!" Once the dust had settled, the gunner noticed that there was a second Taliban and that he was crawling along the ground, attempting to regain the weapon. With no hesitation, the loader announced "HESH ready!" and the order to fire a second time was given. After a second shell, there was no further

movement on the position and the contact with the enemy to the south was terminated. Everything happened so quickly; the troopers responded efficiently and accurately to the orders.

Summary

In summary, after six months of operations, the members of the cbt tms on the ground have reached a number of conclusions, namely that the movement of tanks cannot be concealed, that we must virtually always use single-file formation, that the obstacles on the routes are under observation or fire, that our range is severely limited by the natural obstacles on the ground and that the tanks have reduced the risks associated with vehicle recovery procedures. During the initial months of the mission, we used and adapted our tactics to the reality of the situation and successfully reduced our limitations.

Photo Courtesy of Author

T32 tank in movement in Zhari District in support of R22eR B Coy (Jan 08)

Conclusion

In conclusion, we can certainly say that no one in Roto 4 reinvented the wheel. We merely used the drills we learned, modifying them slightly to reflect the enemy threat and the reality of the highly complex terrain of Zhari-Panjwai. In observing the enemy reactions and their ways of confronting our tanks, we came to use the tanks for a wide range of tasks in order to limit their knowledge of our intentions. In this context, the tanks and dismounted troops have found their role and the successes gained in operations are necessarily related to this mutual understanding. In six months, immense respect has developed between the various occupations and we are all ready to risk our lives for one another. We have seen tanks barrel toward mined obstacles to support engineers, infanteers entering compounds to make sure that the tanks would not be hit from the flanks and engineers crawling out in the open to secure a culvert. These everyday actions make us realize the power and purpose of the cbt tm.

About the Author

Capt Croteau joined the CF in 1991 as a trooper within 12 RBC in Trois-Rivières. He was promoted to MCpl in 1996 and became an instructor on a variety of winter and summer courses, and held the position of troop Sgt on the Cougar.. He was promoted to Sgt in January 1999 and was appointed troop WO of A Sqn at TR. He later took on a Class B contract with 2 Canadian Ranger Patrol Group and worked as an instructor in that organization for more than four years. He transferred to the Regular Force as an armoured officer on 31 October 2003 and completed the course for officers commissioned from the ranks at St-Jean. He was promoted to Lt in 2005 and appointed head of Troop 62 in view of a deployment with Task Force 4-06. At the end of TF 4-06, he was appointed head of Tank Troop 32 for TF 3-07.

In 2007, he completed the qualification course on the Leopard tank at Gagetown. He participated in training for TF 3-07 in Texas in February and officially joined LdSH(RC) C Squadron of 3R22eR BG. He held the position of troop tank leader for the cbt tm leader (major) course at Wainwright in April and took part in training for TF 3-07 in May at CMTC Wainwright. He took the conversion to Leopard 2 course in Penzertruppenshule, Germany, in June and deployed to Afghanistan from August 2007 to March 2008 as leader of Troop 32. Upon his return, he held the position of battle captain at C Squadron until he was posted to the Armour School in Gagetown in September 2007. He obtained a Bachelor's degree in political science from Laval University in 1995 and a certificate in public service administration from UQAM (Université du Québec à Montréal) in 1997. He completed a Master's degree in political science at UQAM after putting his studies on hold to work full time with the Rangers.

End notes

1. Contrary to what appears in the media, the Taliban are not all suicidal and virtually always look for an escape route when they launch an ambush. The presence of a balanced team, with both tanks and infantry, has a major psychological impact and undoubtedly contributes to reducing the number of attacks.
2. Shell containing many small pellets, the effect of which is similar to that of a 12 gauge shotgun.

THE FUTURE OF CANADIAN AIRBORNE FORCES—PART 2

Lieutenant-Colonel Andrew R. Jayne, CD

In Part I of this article, printed in CAJ 11-1, Lieutenant-Colonel Jayne examined the history of airborne forces in Canada, from their creation in the early years of the Second World War until the end of the 1980s, which found the Cdn AB Regt a unique unit in search of an appropriate mission. LCol Jayne proposed that conflict between political expediency and military requirements has been a constant factor in the fate of Canadian airborne forces.

As the 1990s began, the Cdn AB Regt was very much disillusioned about its role and place in the Canadian Forces.[1] Despite being the nation's rapid reaction force, the 1980s had produced nothing but normal rotations to Cyprus. Rather than deploying to defend Canadian interests abroad, the Regiment was viewed as just another infantry unit, and was even used to train others for international deployment. Adding to the frustration felt by the unit in the early 1990s were warnings to be prepared to deploy to Oka and to the Western Sahara, but neither mission materialized. Significant preparation was conducted for each deployment, only for naught. In the end, all that preparation was seen to be wasted by the frustrated unit. In addition, budgetary pressures again impacted the Regiment in 1992 as it was officially reduced to battalion status.[2]

The Unfortunate End

The appearance of another potential United Nations mission in Somalia was yet another opportunity for the Cdn AB Regt but the choice of the Regiment for the task was not universally accepted within the Canadian Forces or the Army. The Regimental 'extended family' lobbied the military leadership hard to assign the mission to the Regiment in order to reverse recent disappointments, but the nature of the mission was not well suited to the airborne unit.[3] The mission required a mechanized force, and therefore the decision to send the Cdn AB Regt necessitated that vehicles taken from another unit be given to the Regiment along with appropriate training. This was particularly surprising given the limited time (21 days) that was initially available for pre-deployment training.[4] The Army assigned the task to the Regiment, however, and preparations began in earnest.

If the overall suitability of the unit had been the only issue in 1992, the mission to Somalia might now be viewed as a tremendous success. Unfortunately, the state of affairs in the unit was not good. The unit was rife with disciplinary problems, leadership was not consistent at all levels, degrading hazing rituals were in place for new recruits, and instances of racism and anti-social behaviour were evident. The eventual culmination of this situation and the failures to correct it was the tragic murder of Shidane Arone by two members of the Cdn AB Regt.[5] The political situation that erupted as a result of the murder and the subsequent fallout was to prove disastrous for the unit.

The final politically expedient decision concerning the Cdn AB Regt was to be its end. The Regiment was disbanded in 1995 in the aftermath of the very public and very political scandal surrounding what is now known as the 'Somalia Affair'. Measures had been taken immediately to correct the deficiencies in the unit, and it was even preparing for another United Nations mission at the time of disbandment, but it was too late. The

alleged cover-up by senior military leaders, civilian officials and politicians, coupled with the exposure of the now infamous hazing tapes, had created an impossible situation. The MND, David Collenette, believed that there had been too many embarrassments caused by members of the regiment; it had to be disbanded.[6]

Combat Camera IS2005-0179

However, the last decision regarding the Regiment was not based on the root causes of the problems but rather the ways in which these problems manifested themselves in the early 1990s. The lack of leadership and discipline in the unit did contribute to the tragic death of Arone, but ultimately it is sad and ironic that it was a series of politically expedient decisions that created the conditions within Canada and the military that allowed the Cdn AB Regt to reach the state that it did. The unit was created for political reasons to satisfy northern sovereignty and defence commitment concerns. When these concerns faded, so too did the support for the Regiment, denying them the best soldiers and leaders, and the resources to train effectively. It was the lack of a clear role for airborne forces in Canada that was at the heart of the problem.[7]

The Cdn AB Regt ended as it had begun, with a politically expedient solution. Although it was possible for political decisions to decide the fates of the 1st Cdn Para Bn in 1945 and subsequently the Cdn AB Regt, it was not so easy to kill airborne capability and desire within Canada. A kernel of capability survived like a desert flower waiting for the drought to end, ready to instantly bloom when sufficient water was next available.

Canadian Airborne Capability: Fighting To Survive Again

The disbandment of the Cdn AB Regt in 1995 left residual airborne capability in the Canadian Forces in a sad state of affairs with little traction for sympathetic intervention by military leaders or politicians. Airborne advocates and former unit members felt betrayed by the military leadership and the government. The vanguard unit of the Canadian Forces had been lost and, therefore, something challenging and intangible for soldiers to aspire to (the airborne esprit de corps) had also been lost.[8] This was unacceptable and unforgivable for many airborne proponents both inside and outside of the military. The decision to dismantle the unit rather than continuing the process that

was underway to fix problems was unfathomable to some, but it had been done. So, with the troops getting ready to return to their parent units, army planners were working on ways to retain an airborne capability.[9]

The unfortunate truth was that, in Canada, an airborne capability was obsolete. Many military leaders and critics pointed out that airborne forces were a thing of the past. Surface-to-air missiles and reliance on scarce airlift limited the usefulness of this capability. This may not have been entirely true for all countries but for Canada it did not matter. The tragic end of the Regiment was simply the balancing of an unequal equation that had been artificially sustained since the end of World War II. The problem was never one of finding a clear and pervasive role for the airborne; the problem was that there was no clear and pervasive role to find within the Canadian context. This subjected Canadian airborne forces to uncertainty and politically expedient solutions from the very start. The exact same situation again doomed them to a minimal existence from the disbandment of the Cdn AB Regt until the present day. Even this minimal existence was not immune to the effects of not having a clear role. The small seed of capability that remained would also be subjected to politically expediency.

Many plans were put forward to retain some airborne capability following the disbandment of the Regiment. These included a smaller commando group, the retention of a company group within a Canadian airborne holding unit, and even the re-establishment of 1 Cdn Para Bn.[10] The scandal that surrounded the Cdn AB Regt in the mid 1990s had framed a situation in which any plan that was implemented would be subject to political pressures and influences. The decision that was finally made bore a striking resemblance to many previous decisions regarding airborne capability in Canada. It was described by Professor Horn as "blatantly political."[11] The plan called for a return to the Mobile Striking Force (MSF) model of decentralized parachute companies. Anything more would have been politically unacceptable, but this again left Canadian airborne capability in an extremely difficult situation.

The *1994 White Paper* made no direct reference to the requirement for either an airborne or a parachute capability.[12] Without a clear role and a centralized organization, parachute training became a lower priority within the Canadian Forces. The Air Force was less inclined to provide aircraft to support training, and the light infantry battalions who possessed the parachute companies also had difficulty conducting training.[13] The struggle to maintain even a minimal capability had started once again. The remainder of the 1990s and the first years of the new millennium would not significantly change this situation. There would continue to be proponents of airborne forces advocating plans for increased capability and critics who would oppose such moves for a variety of reasons.

Enduring Hope

Proponents of airborne capability have continued to fight for what they believed to be necessary within the Canadian Forces. Their arguments have ranged from passionate discussions in the Mess over the requirement to provide challenging and demanding training for soldiers[14] to formal presentations to the Army Training Council on the future of mass parachute drops.[15] An article published in the *Army Doctrine and Training Bulletin* in 2002 argued that the Army should not debate the validity of parachute operations but rather the scale and nature of such operations.[16] As well, the current iteration of the Canadian Joint Task List maintained by the Chief of Force Development includes the task to conduct airborne forcible entry.[17]

The inclusion of forcible entry on the Joint Task List might be used by some as justification for a capability and as the basis of a clear role for airborne forces, but this argument is flawed. There are many other tasks on the list that Canada does not

develop and maintain, such as combat search and rescue. The task list is simply a compendium of all potential military tasks that should be considered during force development, not those that are necessarily required or essential to Canada. So, despite continued efforts to develop more capability and the enduring hopes of many supporters, the fact is that airborne capability does not exist in Canada and parachute capability struggles to stay alive. LCol Bruce Ewing, the first Commander of the Canadian Forces Land Advanced Warfare Centre (CFLAWC) and an expert on Canadian parachute capability, has described the current capability being maintained as minimal, and in many cases falling below that level.[18]

The level of capability that currently exists is the result of a decade in limbo that was continually reinforced by the lack of a clear role for Canadian airborne forces. This situation made even the residual capability an enticing target for reductions. The last major work on parachute and airborne capability in Canada was a report tabled in 2000. This report stated that:

> The CF [Canadian Forces] requires the ability to respond to an emergency, anywhere in Canada and abroad, on short notice. For the foreseeable future, the maintenance of core joint parachute capability, including parachutists, cargo and equipment drop, with the inherent airlift capabilities, is necessary.[19]

The rationale stated in the report may seem like a clear requirement yet, in reality, it remains vague and unconvincing. This was perhaps best demonstrated by the fact that the same report recommended eliminating the three parachute companies and forming a single parachute company in the Canadian Parachute Center (CPC).[20] This recommendation was never implemented.

In addition to not implementing changes to the parachute companies, the Army issued guidance in 2004 that light forces would not generate any airborne capability. Parachute delivery skills were to be maintained to the extent that current Canadian Forces tasks demanded, and therefore the parachute companies were to be retained in the light infantry battalions.[21] The current tasks that guidance referred to were support to search and rescue training, and support to a major air disaster (MAJAID), both of which were fulfilled by CPC.[22] Clearly, there was a very fragile link between the parachute companies and assigned tasks.

Not only is there a weak link between existing capability and tasks, in 2005 CPC itself was under considerable scrutiny to achieve cost-savings. The Government Expenditure Review Committee targeted CPC for reductions, and the VCDS issued direction in March 2005 to transform parachute training capability to save $7,000,000 by fiscal year 2009/2010.[23] The Army Commander argued that this would virtually eliminate all CPC's widely varied tasks and adversely affect a number of non-Army agencies. These tasks included support to the standing MAJAID task, delivery of training for the full range of courses required for parachute and airborne capability, and maintenance of associated equipment.[24] The Army Commander argued that it was not prudent to carry out reductions to CPC before the Defence Capability Plan (DCP) was complete and the impacts of Army transformation were fully appreciated. He proposed transforming CPC into the CFLAWC to maintain certain niche capabilities that could be readily developed, rationalized, and adopted for the conduct of integrated, complex and unique operations.[25]

The proposed role of the CFLAWC was the training of Canadian Forces personnel for employment in complex terrain (arctic, desert, jungle, and mountain) and unique operations (airborne, air transported, airmobile and amphibious).[26] It is interesting to note that the core parachute and airborne training capability was maintained by creating a new role with wider responsibilities for the training establishment, rather than by defining a clear and pervasive role for the capability. In order to achieve this

transformation, the Army absorbed the initial directed savings of $1,000,000 from other sources and promised to conduct a training needs analysis based on the DCP before requesting any new funding to support CFLAWC.[27] This situation has still not been resolved. Although CPC has been renamed as CFLAWC, the DCP has still not been published and the Army had requested funding relief in excess of $4,000,000 for fiscal year 2007/2008 in order to keep CFLAWC operating.[28] The nucleus of an airborne capability in Canada has been maintained once again.

The role of CPC was expanded to include tasks that were considered more relevant to senior leaders and could be rationalized to government as a practical expenditure of funds. In reality, although CFLAWC has taken on additional responsibilities as the centre of excellence for arctic, jungle and desert operations as well as the conduct of advanced winter warfare courses, the focus remains on parachuting. The new responsibilities were taken on with the addition of only nine positions from force expansion credits.[29] This is not to say that the parachute training conducted by CFLAWC is not required. The training provided to search and rescue technicians and Special Forces personnel are essential to maintaining current capabilities. As well, CFLAWC has a role in supporting the current MAJAID response. The fact that these essential capabilities would be endangered by their uninformed association with an airborne capability speaks volumes about the tenuous position of this capability in Canada.

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It is not only in Canada that airborne forces are being questioned. In the U.S., the Global War on Terror and the current war in Iraq have given rise to a plethora of academic studies on the new battlespace and the impact that asymmetric warfare will have on conventional military forces. Professor Barry Posen believes that the struggle against terrorism will require more Special Forces with enhanced capabilities. He proposes the reorientation of active units such as the 82nd Airborne Division and 101st Air Assault Division to the task of fighting terrorism as Special Forces rather than with the conventional capabilities they now provide.[30] Marina Ottaway agrees that 'nation building' is not a task for airborne forces but argues that it has to be done by a military

capability willing to use deadly force over a long term campaign.[31] Finally, Michael Melillo argues that "Only by creating a force that is just as adept at conducting small wars against irregular enemies as it is at conducting big wars against conventional foes will the United States be able to ensure security in the 21st century."[32] He goes on to reinforce the importance of Special Forces as a key player in fighting asymmetric or irregular threats. This line of reasoning is having major effects in Canada as well.

The transformation that the Canadian Forces is currently undergoing is serving to undermine the tenuous position occupied by airborne capability in Canada. The creation of Canada's Special Operations Forces Command (CANSOFCOM) and its Canadian Special Operations Regiment (CSOR) now provides something more challenging for Canadian Forces members to strive for. The existence of a unit that draws mentally and physically robust volunteers from across the military bears striking similarity to the intangible role that the Cdn AB Regt used to fulfil. The ability of the Canadian Forces to generate sufficient volunteers to meet the demanding standards for the CSOR was in question from the outset[33], so the ability to generate sufficient volunteers for both CSOR and an airborne capability is highly improbable. However, this fact does not deter everyone from continuing to strive for a new airborne capability.

Transformation has expanded the role of Special Forces within the Canadian Forces but it has also been the most recent cause for hope among supporters of an airborne capability. The vision of a strategically relevant and responsive force is exactly the type of thing that proponents argue airborne forces could provide for Canada. They focus on what has previously been described as the greatest strength of airborne forces—the rapid projection of power over great distances. Unfortunately, the vision that General Hillier conceived as CDS does not include any mention of a new airborne capability.[34] The vision includes new command and control structures, an operational command for Special Forces, and a standing contingency task force based on a strategic sealift platform.[35] These are the elements that are designed to achieve strategic relevance and responsiveness for Canada within the contemporary operating environment. Although there is renewed emphasis on the requirement to protect Canada, the lack of a clear role for airborne forces within this transformation vision has once again opened the door to making decisions regarding airborne forces that are based on political expediency vice military requirement.

A New Political Expedient

The politically expedient decision to disband the Cdn AB Regt by the Liberal Government and their subsequent dismissal of the Somalia inquiry before it was complete was fiercely criticized by the opposition parties.[36] As with many political issues, the mistakes of one party are embellished by the others and promises are made to set them right when the party in question gains power. So, on 22 December 2005, Stephen Harper announced in Trenton that the Conservative Party envisioned an airborne regiment and the associated airlift stationed at Trenton to respond rapidly to emergencies throughout the Arctic region.[37] This unit would consist of 650 regular force personnel, co-located with the capabilities already resident in Trenton as part of the CFLAWC and some newly acquired strategic and tactical airlift assets.[38] The reasons behind this announcement may not be as simple as they appear on the surface. The editor of the Canadian American Strategic Review opined:

> Of course, in the nearly thirty years that the Canadian Airborne Regiment was in existence, it never deployed by parachute. So why have the Conservatives singled out paratroopers for an Arctic role? It might have more to do with promises made at Trenton than with the Arctic.[39]

The Conservative Government was elected in January 2006 and very shortly thereafter the MND, Gordon O'Connor, visited CPC and raised morale considerably by emphatically stating that he was committed to establishing a parachute battalion in Trenton.[40] Although the promise had changed from an airborne regiment to a parachute battalion, the government was continuing to provide new hope for proponents of airborne forces. Ironically, this new hope has arrived at a time when the situation within the military has already changed to the point that an airborne capability will not be universally welcomed, especially at the expense of other initiatives.

There are two major indicators why airborne (or even parachute) forces will not be acceptable to the military in today's environment. First of all, LCol Ewing has argued that the concept of recreating mass drop airborne capability is out of step with the military, political and fiscal realities of today, and that it ignores the rapid changes that have been taking place in parachuting.[41] He believes that the future of parachute forces in Canada lies with the precision insertion of small groups of soldiers for specific tasks that do not necessarily include an emergency response to the Arctic or traditional airborne tasks such as forced entry.[42] This concept is in complete concert with the increase in Special Forces in Canada that use parachutes as one means of inserting small groups of soldiers into a theatre or an operational area.

Secondly, the CDS vision for the Canadian Forces to include an airborne unit in Trenton has not yet been amended, but has continued to support the concept conceived before the Conservative Government came to power. There have been adjustments to the plan but arguably most portions of the vision have been expedited by the change in government and new defence spending rather than hampered by it. The Canadian Forces have incorporated many of the changes brought about by the Conservative government into their planning. The 'Canada First' strategy, territorial defence battalions, icebreakers, strategic airlift, and emphasis on the Arctic have all found their way into military plans and daily conversation. The most notable omission in Army planning documents is any reference to a parachute or airborne unit in Trenton.[43] It appears as if the military's vision of strategically relevant and responsive forces still does not include airborne forces. If the Conservative Government does succeed in establishing a new parachute/airborne unit in Trenton, it will be for political vice military reasons.

The current hope for airborne forces in Canada is politically driven and the military requirement for airborne forces is the subject of debate. There are still advocates in the military that continue fighting to re-establish airborne forces by protecting the seeds of a capability using many different justifications. These justifications include MAJAID, protecting Arctic sovereignty, and conducting forcible entry for expeditionary forces. The fact remains, however, that there is still no clear, viable role for airborne forces in Canada.

The response to northern emergencies such as a MAJAID is adequately provided for by current Search and Rescue assets and CFLAWC. Each Search and Rescue aircraft can drop personnel and resources to care for 20 survivors, and CFLAWC has 12 personnel and prepared equipment to care for an additional 320 survivors on four hours notice to deploy.[44] The frequency of flights over the Arctic is increasing but the probability of a crash during level flight combined with the probability anyone would survive to be rescued[45] precludes the necessity for a more robust response.

The requirement to respond to northern emergencies or to defend Canada's Arctic sovereignty is no more compelling than it was during the Cold War. The debate over Arctic sovereignty is not new, but it has new emphasis due to global warming and the implied threat of increased international shipping through the Northwest Passage.[46] The ice is melting but it is unlikely that this trend will present a challenge to Canadian

sovereignty over the region,[47] especially of the sort that could be countered with an airborne capability. The Cold War threat of an enemy lodgement on Canadian territory provided a more compelling requirement for airborne forces than the threat of increased shipping does today. It appears as if the Arctic continues to be a boon and a bane.

Given Canadian history and current international policies and defence plans, the requirement to conduct a forcible entry in a hostile foreign country is an unlikely response to protect national interests. The government certainly views airborne forces as a means of defending Canada instead of a means of projecting national power, and the military has not yet included it in strategic plans for domestic or international purposes.[48]

Despite facts that nullify the justifications airborne advocates use, there are political motives at play. This time they aim to build airborne capability to right the wrongs of a previous government and promote Canadian sovereignty of the Arctic. For those in uniform, it seems extremely difficult if not impossible to let go of the past. The proud history of airborne forces in World War II has continued to have influence today. The enduring pride of past accomplishments and airborne traditions continue to live on in those who have served in some airborne capacity. These soldiers have served admirably and they must always be remembered for their service; however, it is also time to face reality.

Canada has not required airborne forces in the past and nothing has happened to change that fact. Creating a unit or capability for purely political purposes without a credible role will place the potential leaders and soldiers involved in an unfair position. They may be initially filled with pride, accomplishment and a profound sense of purpose but, in the end, the Cdn AB Regt demonstrated that the lack of a clear role could have undesirable effects. Recreating that situation is not a fitting honour to those who have gone before. Perhaps the situation will change in the future.

Future Canadian Airborne Capability

The future of Canadian airborne capability is unknown. Political expediency could again come into play or a pervasive, clear role could be found. As previously stated, there are many, both internal and external to the military, who argue for a return of the Cdn AB Regt. At present, it appears as if they have found hope in the Conservative Government's plan for a new unit in Trenton. Senior military leaders and planners, however, do not seem to share the government's understanding of the requirement for this new unit. An examination of what is currently understood about the future environment in which the Canadian Forces will be expected to operate will allow an extrapolation of whether or not a future requirement exists for airborne forces. This analysis will allow the central question to be answered: Does Canada require an airborne capability?

Before making predictions about the viability or potential requirement for Canadian airborne forces, it is necessary to understand something about the difficulties of reliably predicting the future, especially in predicting the future of warfare based on recent experiences. Dr. Colin S. Gray wrote in 2005 that "… four caveats, or warnings … bear upon the degree of confidence that should, and should not, be placed in strategic futurology."[49] Understanding these warnings and avoiding their dangers will not allow a greater degree of precision in predicting future requirements but it will ensure that the analysis is not fundamentally flawed by an avoidable error. Dr. Gray's four caveats are:

- War should not be approached in ways that would divorce it from its political, social and cultural contexts.

♦ Defense [sic] establishments are apt to develop impressive military solutions to problems that they prefer to solve, rather than those that a cunning or lucky foe might pose.

♦ Trend-spotting and analysis is not a very helpful guide to the future. The strategic future is driven by the consequences of the trends we see, trends which interact and can trigger nonlinear developments.

♦ Surprises happen. Some are agreeable, while some are not. It is unlikely that we will prove any more farseeing than were our predecessors.[50]

A considerable amount of work and research has been done within the Canadian Forces and Allied nations for the express purpose of understanding how the world is changing and what threats may present themselves but, as Yogi Berra said, "It's tough to make predictions, especially about the future."[51] Conclusive arguments based on future predictions that use qualifiers such as 'most', 'likely' or 'foreseeable' are also difficult, however this is exactly what is required since the current view of the future for the Canadian Forces does not specifically state whether or not airborne forces are required.

In order to determine Canada's need for airborne forces, the current body of work will be analysed to determine whether or not it supports a Canadian requirement for airborne capability and how that requirement might be extrapolated. The extrapolation will then be judged based on Dr. Gray's caveats about future predictions. In the end, the extrapolation that best heeds these warnings will be the best prediction about the future.

A Future That Requires Airborne Forces?

Within the constructs of the Future Security Environment (FSE) and the Contemporary Operating Environment (COE) it is not hard to envision a series of scenarios where airborne forces could be a decisive element for the Canadian Forces. The extant National Security Policy (NSP) of 2005 states that Canada has decided to concentrate its efforts in areas of the international security environment where it can make a difference, i.e. in failed or failing states.[52] The ability to respond to these challenges is to serve as the benchmark for the Canadian Forces. In order to achieve this goal, Canada will need to maintain effective, relevant and responsive armed forces with substantial capabilities that will also enable responses to other international contingencies. This will provide insurance against the unexpected as the Canadian Forces must also be prepared to act quickly in the event of crises, both in Canada and around the world.[53] Within this context, there are two major operations where the requirement for airborne forces could be adequately justified—the seizure of an airport or the rapid response to a crisis within Canada.

The ability to respond to international crises to conduct stability operations or non-combatant evacuation operations (NEO) normally requires a secure airport that can be used to support the force. It cannot be guaranteed that this will be possible within a failed or failing state, and it might be necessary to forcibly take and hold one in order to deploy a larger force, evacuate civilians, deliver humanitarian aid or assist in stabilizing a foreign government. Airborne forces are ideally suited to this task[54] and it is relatively easy to extrapolate this requirement from what is predicted about the future. The problem with deducing that Canada requires airborne forces based on a specific operation within this view of the future is related to Dr. Gray's first and second caveats. A Canadian airborne force seizing an airport is a concept that is divorced from the political, social and cultural contexts of Canada, and it is an impressive military solution to a preferred problem.

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The need to understand the political, social, and cultural context that future Canadian military capabilities will be required to support is evident. The Directorate of Land Strategic Concepts (DLSC) held a symposium in 2003 on "Canada's Army in the 21st Century". The first chapter of the proceedings deals specifically with the political and social framework within Canada. The Army Commander at that time, LGen M.K. Jeffery, stated up front that these issues cannot be ignored in determining where we go in the

future.[55] Two relevant aspects can be drawn from the context presented at the symposium. The first is that problems between Canadian society and the Army can result from different perspectives being adopted by the different groups.[56] That is to say that if the military envisions a warfighting response to an international situation and the government envisions diplomacy, tensions will exist. The second is that warfighting still determines the central beliefs and values that define the Army, but this construct does not resonate well in post-modern Canadian society.[57] Canadian society is far more comfortable with the role of the military as a force for peacekeeping and humanitarian intervention than it is with warfighting.

The use of airborne forces to seize an airfield is an impressive warfighting solution to the problem of getting into a particular location in order to address a problem that the government may need the military to solve. Unfortunately, Canada prefers multi-national approaches to solving international issues and in the past has not required the Canadian Forces to replicate every capability of the world's premier militaries, nor will it in the future.[58] Professor Horn argues that the ability to quickly project national power is seen by politicians as more of a liability than strength.[59] Following allies into trouble spots is less risky than leading the charge, while still contributing to international security. Within this context, it is much harder to envision the Canadian government, supported by the public, committing its military to forcibly seize an objective either unilaterally or even as the vanguard of an international force. It is even harder to envision the dedication of scarce resources to defence spending within Canadian society to ensure that the military has the joint capabilities to conduct these operations, such as attack helicopters and modern multi-role fighter aircraft.[60]

Developing a Canadian airborne capability is an impressive military solution to the preferred problem of rapid international intervention and justification for a multitude of equipments that currently do not exist within the Canadian Forces. Those within the military who advocate airborne forces constantly seize upon this solution as a role for airborne forces. Unfortunately, although surprises do happen, this solution has a low probability of being acceptable in the future due to the Canadian context. There is, however, the other main justification that advocates use to support airborne capability within Canada—responding to a crisis at home.

The requirement to have an airborne capability to quickly respond to crises within Canada is not a viable role nor has it been throughout the history of airborne forces in Canada. In this situation, it is a case of both the military leaders and politicians solving the problem of national security and protecting Canadian sovereignty in a manner they prefer. The 'ideal' solution to the problem of defending the vast reaches of Canada with the least amount of resources has been airborne forces since the very first threat was identified. Unfortunately, the same issue has always existed with this 'ideal' solution—the threat to Canada has never been great enough to maintain the capability over the long term. There may be emerging threats to Canadian sovereignty caused by global warming and other developments but they are no more compelling than the threat of a Soviet foothold was during the Cold War.[61] The extrapolation that Canada requires airborne forces in the future does not heed Dr. Gray's warnings well at all.

An extrapolation that better observes Dr. Gray's caveats is required. It has been demonstrated previously that any capability that Canada creates will need a clear role, and the potential to be employed in that role, in order to be relevant and to avoid the troubles this situation has caused for previous Canadian airborne forces. In other words, it will have to fit within the political, social and cultural context of Canada. It is therefore more appropriate to envision Canada filling a more general and sustainable role (across the full spectrum of conflict) within a coalition of the willing in order to protect Canadian

interests at home and abroad. Fortunately, it appears as if this is the direction that the Army is taking in the new "Force Employment Concept for the Army of Tomorrow".[62]

Airborne Forces In The Army Of Tomorrow?

The new Force Employment Concept (FEC) states that the Canadian Forces' "…core mandate is—and will continue to be—the defence of Canada and Canadian interests and military contribution to international peace and security."[63] It calls for an Army capable of conflict intervention across the full spectrum of the FSE through an operating concept of adaptive dispersed operations. This concept will provide an approach to conducting complex, multi-dimensional conflict within a non-contiguous dispersed battlespace.[64] In order to achieve this goal, the Army will have to generate combat-effective, multipurpose forces that are strategically relevant and tactically decisive.[65] Within the characteristics of these two core elements and their corresponding capability requirements it is possible to extrapolate whether or not airborne forces have a role in the Army of Tomorrow (AoT).[66]

Strategic relevance refers to the Army's ability to "project a credible, timely, nationally and internationally recognized Land Force capability."[67] The two characteristics of strategic relevance that are germane are adaptable and deployable. Adaptable forces will have to operate in a complex and extended battlespace while effectively operating across the full spectrum of conflict. Deployable forces will be modular in design and include capabilities that allow for timely responses at home or abroad. A tactically self-sufficient and robust element will be immediately deployable by air while the remaining forces assemble and move by sea.[68] Airborne forces are not adaptable across the entire spectrum of conflict; they fulfil specific roles and tasks. They are certainly strategically and tactically deployable, but they are not usually described as tactically self-sufficient and robust even in the world's premier militaries. The need for surprise and the lack of equipment, fire support and mobility once on the ground[69] that are inherent to airborne forces do not fit the future mould of strategic relevance.

Tactical decisiveness refers to the Army's ability to:

> … integrate all capabilities required to prevail in the future battlespace. Information dominance, assured timely sustainment, and highly agile, mobile and lethal forces will provide the overmatch required to win throughout the spectrum of conflict.[70]

The relevant characteristics of tactical decisiveness are mobile, modular, and survivable. Airborne forces can certainly be mobile but the AoT envisions mobility throughout the battlespace at any time, in any weather and by any means. There is certainly an argument to be made that airborne forces are highly mobile, but their dependence on airlift and the limitations inherent in that mode of transport limit their use to specific conditions. Modular forces in the adaptive dispersed operating concept will allow the Land Force to be adaptive, robust and agile to rapidly deploy and remain sustainable.[71] The AoT also mentions that these forces must be multipurpose to provide full spectrum capability and that they may contain a mixture of medium, heavy and light forces. These light forces would compensate for reduced combat power through agility in specific roles[72], which does seem to open the door for airborne forces. Finally, the AoT will require forces that are survivable. Airborne forces do not possess the same survivability characteristics as medium or heavy forces. This will certainly be a limiting factor.

Taken as a whole, and within the overall context of the FEC, the requirement for an airborne capability does not extrapolate well from the characteristics of strategically relevant and tactically decisive land forces if, of course, one heeds Dr. Gray's warnings.

There are opportunities, as before, to extrapolate the requirements for deployability, mobility and light forces (within modularity) into an airborne force. In doing so, one falls into similar pitfalls as before; the solution corresponds to a preferred problem and it ignores the Canadian context.

In order to meet future requirements, the AoT will need balanced, modular forces that are "adaptive, remain robust, and provide the agility needed for rapid and sustained deployment of forces at home and abroad."[73] This means that more than one element of each capability will be required to sustain operations over a longer period of time, respond to multiple crises, or reconstitute while maintaining readiness. Given the Canadian context, it is not realistic to project sufficient airborne forces to accomplish these requirements. Certainly, the Conservative Government's plan for a parachute battalion in Trenton is insufficient.

The extrapolation that Canada does not need airborne forces is more mindful of Dr. Gray's caveats. It is in keeping with the political, social and cultural context of Canada. Although the future will require Canadian Land Forces that are strategically relevant and tactically decisive, the existence of a unique airborne capability does not fit well into the concept of robust and adaptive forces that can be deployed and sustained to support national policy. Not creating airborne forces for a specific situation of forced entry avoids the pitfall of creating a capability to solve a preferred military solution. Finally, although it can be argued that surprises do happen, Canada's current alliances and defence agreements provide a large degree of security against the unknown.

It should be noted that this extrapolation does not rule out the possibility of parachuting being conducted within the Canadian Forces. As previously stated, LCol Ewing is in the process of advocating a role for precision parachuting within elements of the Canadian Forces such as the CSOR, infantry reconnaissance platoons and others. He believes that while

> this proposed re-alignment of parachute forces and tactics away from the mass drop concept to an increased use of precision parachute forces in the CF, for both the LF and SOF, would require a complete change of mindset for many people, … it would truly provide … a credible, capable, and vital force….[74]

However, these forces are not airborne nor are they formed in a single parachute unit or formation. They are an integral part of a balanced, joint force capable of operating in the future battlespace and of being sustained over time. It does not appear that the AoT holds much hope of providing the water necessary for Canada's desert flower—airborne forces—to bloom again. While this may prove true, there is no way to predict whether or not political expediency will play a role in a future airborne force. It can, however, be said with some certainty that, if Canada does form a new airborne force, political expediency will play a role.

Conclusion: The Final Analysis

Canada developed airborne forces at the start of Word War II driven by a military desire to have this new capability and a political need for homeland security. The 1st Cdn Para Bn was sent to the war to fight under British command and served with such valour, distinction and honour that they shall always be remembered and should forever be praised. Following the war, the political situation in Canada saw the disbandment of many units, including the 1st Cdn Para Bn, but a kernel of capability clung to life. The torch was first carried by the SAS Coy, then the MSF, and finally the DCF before the Cdn AB Regt was formed in 1968. Each successive modification of the capability was driven by political expediency and military decisions made easy by the lack of a clear role.

The Cdn AB Regt was the epitome of combat readiness and it served Canada with distinction on many operations and in many circumstances but it, like its post-war predecessors, lacked a clear and pervasive role. This fatal flaw meant that it was never used as it was intended. Soldiers and leaders trained hard and were proud of their accomplishments, but the unit never operationally deployed by parachute. Eventually other priorities began to take precedence within the Canadian Forces and the best soldiers and leaders no longer found their way into the Regiment. Leadership and discipline started to suffer. Eventually, the tragic murder of a Somali teenager during a United Nations mission sparked a political scandal that would ultimately see the disbandment of the unit in 1995. Despite the reforms in progress, this incident sparked a politically expedient decision by the ruling Liberal Government to get rid of the problem rather than fix it. This decision did not sit well with many in the military but ultimately, the lack of a clear and pervasive role made it easy for the government and military leaders to react in this manner.

Over the past decade, the kernel of an airborne capability has continued to hang on within the Canadian Forces inside the training establishment and the three dispersed light infantry companies. Today, the level of capability that exists has been described as not being able to get much lower, but there is new hope. The Conservative Party made election promises of an airborne regiment in Trenton and, once they gained power, they announced a new parachute unit in the same location. Unfortunately, the motivation for the announcement was clearly politically motivated and once again tied to the protection and exercise of Arctic sovereignty in light of perceived threats in that area.

Within this context of political change, the Canadian Forces had already started a process of transformation and, although many new defence projects and capabilities have been incorporated into transformation as a result, no evidence can be found of a current military driven requirement for a parachute unit. Therefore, the hope of renewing this capability is false. Even if the government decides to create a new parachute unit in Trenton for political reasons, it will be doomed to the same fate as the Cdn AB Regt. The lack of a clear role will relegate it to a lower priority for resources within the multitude of current defence priorities and it will never be used as it is intended. Furthermore, the creation of CSOR has overtaken the intangible role that airborne forces used to provide. CSOR now provides something for motivated volunteers to aspire to achieve and it is unlikely that the Canadian Forces could generate appropriate numbers of suitable volunteers for two organizations of this type. Without a clear role, creating this capability is a situation that is unfair to the soldiers and leaders involved and one that the overextended Army can ill afford.

The Army has done a tremendous amount of work to envision the future and to produce a FEC for the AoT. This work can be enticing to those looking to justify a requirement for an airborne capability. The requirements for future forces to be deployable, mobile and modular can be extrapolated as the justification for airborne forces. In doing so, one must ignore the warnings that Dr. Gray has provided about predicting the future. Specifically, this extrapolation does not take into account the political, social and cultural context of Canada. Canada envisions a military working within a multinational coalition to support peacekeeping and humanitarian efforts abroad. This will ensure global security and prosperity and serve Canadian interests in a manner that shares the risks involved.

As well, Dr. Gray warns against impressive military solutions to problems that the military wants to solve. Airborne forces in Canada are an example of this phenomenon. It is clear from a more complete analysis of the FEC that the AoT will need to be deployable, mobile and modular but that this does not require airborne forces as the only or even the preferred solution. The AoT will also need to be adaptable across the

spectrum of conflict, tactically self-sufficient, robust, survivable, and multipurpose. In other words, Canada is looking for land forces that can be rapidly generated and deployed to fulfill a wide range of sustained operations across the spectrum of conflict in order to promote national interests at home and abroad. Within the Canadian context, airborne forces do not fit this profile.

It appears that if Canada is to have airborne forces again it will not be due to a clear and pervasive role. Proponents who seek such a capability would be wise to review in detail the myth of Bellerophon that has provided an enduring symbol for airborne forces. Riding on the back of Pegasus, his skill as an archer allowed him to complete heroic tasks and to win the favour of the gods. He gained much, but it was not enough. He decided to ride Pegasus to Mount Olympus but Zeus sent a Gadfly to sting Pegasus. Bellerophon was thrown to the ground and, although he survived, he was crippled. He spent the rest of his life wandering the earth to die alone. Seeking airborne forces for Canada without a clear and pervasive role is tempting the gods. There is a real danger of creating something that is destined to live out a life without purpose, subject to the whim of political expediency. Eventually, it will come to an end leaving soldiers and leaders disillusioned and betrayed.

Despite the emotion, the tradition, political manoeuvring or the wishful extrapolation of possibilities, Canada does not need airborne forces. It is far better to honour those who have served this country as airborne soldiers by holding their accomplishments high and letting their memories live on than it is to create something lacking purpose, something that has more potential to be less than envisioned rather than all that it once was.

Endnotes

1. Horn and Wyczynski, *In Search of Pegasus*…, 122.
2. Horn and Wyczynski, *Hook-Up!* …, 176; and Horn and Wyczynski, *In Search of Pegasus*…, 122.
3. Horn and Wyczynski, *In Search of Pegasus*…, 122.
4. Horn, *Bastard Sons*…, 192.
5. Bercuson, *Significant Incident*…, 215.
6. *Ibid*., 240-241.
7. Horn, *Bastard Sons*…, 228.
8. *Ibid*., 249-250.
9. Luke Fisher, "Ottawa Kills the Airborne," *Maclean's Magazine*, February 6, 1995, http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=M1ARTM0010382; Internet; accessed 25 February 2007.
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11. *Ibid*., 256.
12. A thorough search of this document revealed no direct references to airborne or parachute capability. Department of National Defence, *1994 Defence White Paper* (Ottawa: Canada Communications Group, 1994).
13. Horn, *Bastard Sons*…, 257.
14. The author has had a few of these discussions over the past few months. The requirement to provide challenging training to soldiers is not at issue. The issue is whether or not an airborne capability is the best or only way to meet the aim.
15. LCol R.B. Ewing, "Precision Parachute Capabilities and their Potential Employment in the Canadian Forces", (Master's thesis, Royal Military College, 2007), 4. LCol Ewing noted that in 2003 the Commanding Officer of the Canadian Parachute Centre, LCol Mike Blanchette, presented mass parachute drops as the future of parachute forces to the Army Training Council.
16. Capt David M.G. Beatty, "The Future of Parachute Operations," *Doctrine and Training: Canada's Professional Journal on Army Issues* 5, no. 3 (Fall 2002): 53. The article advocates the use of smaller parachute forces to achieve strategic effects.
17. Department of National Defence, *Canadian Joint Task List*. Task 4.2.3 is to "Conduct Forcible Entry: Airborne, Amphibious & Air Assault. To conduct operations to seize and hold a military lodgement in the face of armed opposition, to strike directly at enemy operational or strategic centre(s) of gravity, or to gain access into a theatre of operations/ JOA or for introducing decisive forces into the region. A joint force may be tasked to do this by airborne, amphibious, and/ or air assault in conjunction with other maritime, air, and special operations forces comprising the joint force.

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19. Department of National Defence, *The Canadian Forces Parachute Capability Study*…, 47.
20. *Ibid*., 47.
21. Department of National Defence, *CLS Capability Development Planning Guidance—Light Forces*, (Chief of Land Staff: file 3189-1 (CLS), 8 July 2004), 4.
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23 MGen J.G.M. Lessard, *LFC Expenditure Review (ERC)—Implementation Plan and Risk Analysis*, (Assistant Chief of Land Staff: file 7000-1 (DLSP 4-3), 5 November 2005), 1.
24. *Ibid*., 2.
25. *Ibid*., 2.
26. *Ibid*., 2.
27. *Ibid*., 3.
28. LGen A.B. Leslie, *Land Forces Command Business Plan, Part 1—SORP 2007*, (Chief of Land Staff: file 7000-1 (DLSP 4-3), 12 November 2006). $ 3,000,000 was requested to relieve Expenditure Review Committee directed savings in fiscal year 2007/2008 and a further $ 1,200,000 was requested for alternate service delivery of aircraft to support parachute training.
29. LCol R.B. Ewing, interview with author, 23 March 2007. The assumption of the full range of responsibilities would require additional augmentation and/or positions.
30. Barry R. Posen, "The Struggle Against Terrorism—Grand Strategy, Strategy, and Tactics," *International Security* 26, no. 3 (Winter 2001/2002): 49.
31. Marina Ottaway, "Nation Building," *Foreign Policy*, no. 132 (Sep-Oct 2002): 18.
32 Michael R. Melillo, "Outfitting a Big-War Military with Small-War Capabilities," *Parameters* 36, no. 3 (September 21, 2006): 22.
33. Department of National Defence, *Canadian Special Operations Regiment*, (UNCLAS CANFORGEN 195/05 DCDS 185 201320Z DEC 05), n.p.
34. General Rick Hillier, "Setting Our Course: The Way Ahead for Our Canadian Forces," http://www.cds.forces.gc.ca/00native/ppt/cds-vision_e.ppt; Internet; accessed 23 March 2007.
35. It should be noted that the CDS has stood down the Standing Contingency Task Force due to operational and fiscal pressures but he maintains that the integration of sea-land-air effects is important for future flexibility and relevance of the CF. Department of National Defence, *Integrated Sea-Land-Air Effects Concept Development and Experimentation*, (UNCLAS CANFORGEN 059/07 CDS 013/07 051855Z APR 07), n.p.
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37. Dianne DeMille and Stephen Preistly, "Rapid Emergency Response," *Canadian American Strategic Review*, http://www.sfu.ca/casr/ft-harper1-7.htm; Internet; accessed 23 March 2007.
38. Canadian Association of Defence and Security Industries, "Conservative Election Platform for Canada's Defence and Security," http://www.defenceandsecurity.ca/public/docs/2006/march/conservative %20defence%20platform.pdf; Internet; accessed 23 March 2007.
39. Dianne DeMille and Stephen Preistly, *Rapid Emergency Response*, n.p.
40. LCol R.B. Ewing, *Precision Parachute Capabilities*..., 3.
41. *Ibid*., 4.
42. *Ibid*., 5, and LCol R.B. Ewing, interview with author, 23 March 2007. Outside of Special Forces requirements, LCol Ewing considered the requirement for a parachute company group to conduct non-combatant evacuation operations in either a permissive or non-permissive environment as the largest organization required by the Canadian Forces. The other requirement for precision insertion of soldiers was limited to the reconnaissance platoons of the nine infantry battalions.
43. LGen A.B. Leslie, *Land Forces Command Business Plan, Part 1—SORP 2007*, (Chief of Land Staff: file 7000-1 (DLSP 4-3), 12 November 2006). This document includes plans for force expansion, territorial defence battalions and increased emphasis on the Arctic through the Canadian Rangers, but it does not include a plan for establishing a new unit in Trenton. In fact, regular force restructuring is completely focussed on creating affiliated battle groups.
44. Department of National Defence, *MAJAID Plan Draft V4*, 8 and LCol R.B. Ewing, interview with author, 23 March 2007. This response package is more than sufficient to deal with the projected number of casualties that might result from a major airliner crash in the Canadian Arctic.
45. The US National Transportation Safety Board data for the past 10 years indicates that there are an average of 2.2 major disasters (causing multiple casualties) each year and that 98% of the total casualties caused were caused on board of the aircraft. National Transportation Safety Board, "Aviation Accident Statitics," http://www.ntsb.gov/aviation/aviation.htm; Internet; accessed 14 April 2007. If this data is combined with the fact that only 6 % of airline accidents result from mid-air flight then the chance of an arctic major air disaster is extremely small. Boeing, "Statistical Summary of Commercial Jet Plane Accidents," http://www.boeing. com/news/techissues/pdf/statsum.pdf; Internet; accessed 3 February 2007.
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47. *Ibid*., iv.
48. General Rick Hillier, "CDS Transformation SITREP 02/05," 7 September 2005, http://www. cds. dnd.ca/cft-tfc/pubs/SITREP0205_e.asp; Internet; accessed 23 March 2007. This document states the Department has initiated the

development of a Defence Capability Plan (DCP). The DCP will articulate the capabilities necessary to attain strategic objectives identified in the DPS and the National Security Policy (NSP). These capabilities will then be costed to balance resources against capability requirements, and identify capabilities for elimination or curtailment to focus limited resources on those areas that will provide Canada with relevant, responsive and effective forces. Concurrently, systems and structures that are less effective or relevant to operations must be rapidly divested. The author was unable to find any indications, unlike a wide range of other capabilities that have been identified as priorities (ships, aircraft, command structures, etc), that airborne capability has been extrapolated from the DCP or NSP by military commanders or staff.

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56. Donna J. Winslow, "Canadian Society and its Army," in *Towards a Brave New World: Canada's Army in the 21st Century*, ed. LCol Bernd Horn and Peter Gizewski, 1-22 (Canada: Army Publishing Office, 2003), 14, 18.
57. *Ibid*., 14, 18.
58. Department of National Defence, *Canada's International Policy Statement … Defence*…, 11.
59. Horn and Wyczynski, *In Search of Pegasus* …, 240.
60. The resources and capabilities to conduct airborne operations are covered in Part 1. They include but are not limited to airlift, suppression of enemy air defences, fighter support, close air support, attack helicopters, joint fires and sustainment.
61. The Senate Security and Defence Committee reported that they found it 'unfathomable' for politicians to focus so many military resources to protecting Arctic sovereignty when no threat existed. They argue that the greater threat is from shipping and traffic in the Great Lakes and other southern littoral areas. Tenille Bonoguore, "Coastal Defence a Toothless 'Hoax,' Senate Reports Says," *Globe and Mail*, 28 March 2007; www.globeandmail.com; Internet; accessed 29 March 2007.
62. Department of National Defence, B-BL-310-001/AG-001 *Land Operations 2021: Adaptive Dispersed Operations—A Force Employment Concept for the Army of Tomorrow*, (Ottawa: DND Canada, 2007). This capstone document was obtained from the editors immediately following Army Commander approval. The concepts contained therein will be discussed in more detail in this section.
63. *Ibid*., 4.
64. *Ibid*., 16-17. The adaptive dispersed operating concept seeks to create and sustain operational advantage over adept, adaptive adversaries through the employment of land forces alternatively dispersing and aggregating throughout the battlespace.
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66. Department of National Defence, *Future Force—Concepts for Future Army Capabilities*, (Kingston: Directorate of Land Strategic Concepts, 2003), 182-192. This work precedes the new FEC but was fundamental to the process of developing the FEC.
67. *Ibid*., 183-184. The four characteristics of strategic relevance are: adaptable; deployable; interoperable; and modern.
68. *Ibid*., 183-184.
69. Department of National Defence, B-GL-300-002/FP-000 *Land Force Tactical Doctrine*, (Ottawa: DND Canada, 1997), 7-5.
70. Department of National Defence, *Future Force*…, 185. The four characteristics of tactical decisiveness are: lethal; mobile; modular; and survivable.
71. Department of National Defence, *Land Operations 2021*…, 14.
72. *Ibid*., 18.
73. *Ibid*., 14.
74. LCol R.B. Ewing, *Precision Parachute Capabilities*..., 32.

PRACTICAL SUSTAINMENT CONCEPTS FOR THE NON-LINEAR BATTLESPACE

Major Devon Matsalla

Canadian sustainment doctrine continues to be based on a system of echelons, a concept that has served us well even if it has not fundamentally evolved since the Cold War. In this concept, support entities at both operational and tactical levels are separated by lines on the ground stretching from the communications zone (Comm Z) to the forward edge of the battle area (FEBA). Sustainment tasks are defined by lines (located on the ground) and levels (complexity of the task), and service provided is based on an assumed level of threat in each zone. Also, the transfer of equipment, personnel and commodities between support entities is conducted at specific points or in specific areas on the ground, which are normally dissimulated and defended by the support organizations themselves. Finally, when additional support is required in the forward echelons for surge type operations, a completely separate organization from the rear, such as a forward logistics group (FLG), is dispatched forward to superimpose to that echelon, but it remains a second line organization. This system of echeloning of services and tasks has been shown to be maladapted to the current sustainment concept in Afghanistan, and all the OP ATHENA National Support Elements (NSE) have had to adapt their sustainment posture according to a different, as of yet undefined, model.

This article will show that because the counter-insurgency (COIN) battlefield in Afghanistan is non-linear, the support concept should no longer be described using a ground-based system of echelons; rather, a sustainment network founded on interdependencies between secure nodes should be employed. This fundamental shift in perspective has a demonstrable effect of separating the various sustainment tasks along two distinct paths: those that are performed in links and those in the nodes. Node tasks, such as supply and movement, are best coordinated along a technical sustainment chain, whereas link tasks must be coordinated by the operational Act chain. In effect, because of the instability of the environment linking adjacent nodes, link sustainment tasks, such as transport and recovery, must be treated as manoeuvre operations, and coordinated with other manoeuvre units as well. This article will present a hierarchy of sustainment nodes in the network that was adopted for Afghanistan and provide some hints on how sustainment planning can be conducted. Additionally, it will present a sustainment node reinforcement concept that the NSE called the A3, which was put to the test during OP ATHENA Roto 4. Finally, it takes a look at how command and control could be applied to increase the efficiency of the sustainment effort. In a time where resources are limited, this article presents a spectrum of sustainment solutions that can be applied to a given scenario while observing the trade-offs involved in trying to do more with less. This paper is not intended to replace current doctrine; it is rather, hoped that it will spark questions on its future in this non-linear environment.

Sustainment in the Linear Battlespace

Let us take a look at the current sustainment model, shown in Figure 1. Although the idea has allowances for a non-contiguous environment, the concepts all essentially come down to the same support concept, which is based on the linear, contiguous battlefield. In order to demonstrate its applicability to a COIN operation, such as in Afghanistan, let us consider the context of an independent brigade, which is represented

typically in Figure 1(a). Here, the ground is broken up into the familiar echelons, from the Comm Z in the rear, where personnel and materiel are prepared and maintained, up to the FEBA where manoeuvre forces fight the battle in the F Echelon. Figure 1(b) shows how the presumed level of threat increases closer to the front, as one gets closer to the fight. Consequently, we can deduce in Figure 1(c) that the requirement for mobility increases from rear to front.

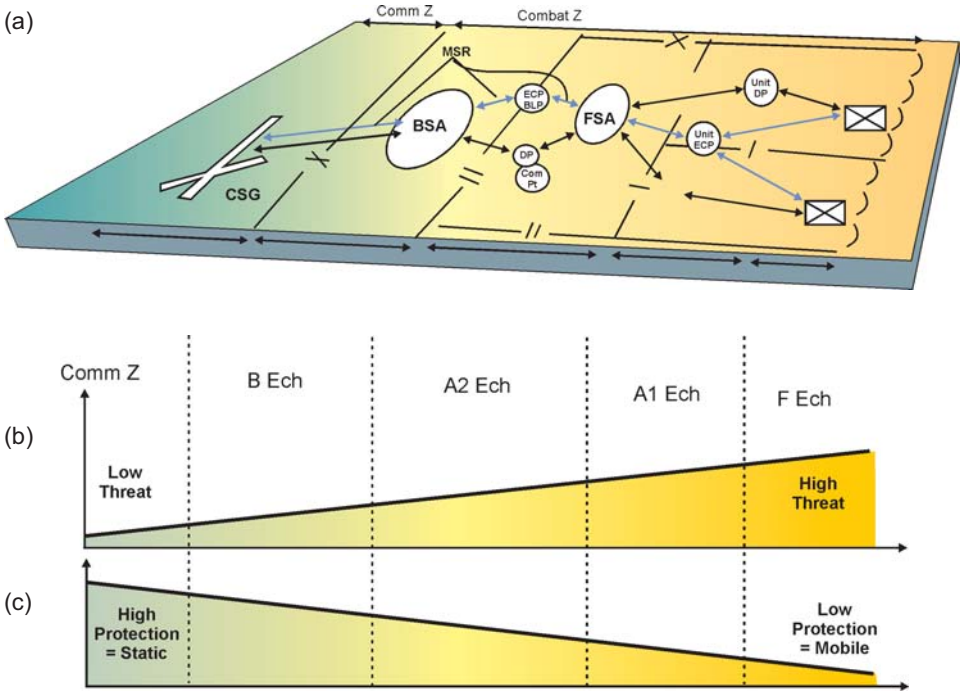

Figure 1: Sustainment based on the linear battlefield

In each echelon, there is a separate, dedicated sustainment organization that performs a specific role as a function of the threat. In the Comm Z, operational support organizations within the Canadian Support Group (CSG) exchange materiel, personnel, and services freely in and out of theatre through the airport of disembarkation (APOD). As threat is low, there is no requirement to achieve protection through mobility, so the opportunity exists to develop static, more complex, support infrastructure. The CSG exchanges resources with the service battalion in or near the brigade support area (BSA) through long administrative convoys. The service battalion, in a still fairly secure environment, can perform complex tasks while remaining somewhat mobile. Through delivery points (DP) and commodity points (Com Pt), resources are exchanged with manoeuvre unit administration companies (Admin Coy), and the increasingly hostile environment limits the complexity of support possible. Resources are then transferred with forward combat teams through additional DP, but now in an unstable environment, and with only mobile support facilities available. Finally, combat team integral support (IS) organizations provide the most limited level of support to the fighting troops in the F Echelon, where the battlefield is rife with enemy activity. There is a definite relationship between protection and the level of production, and sustainment organizations have to be tailored specifically to the threat environment, as shown in Figure 2.

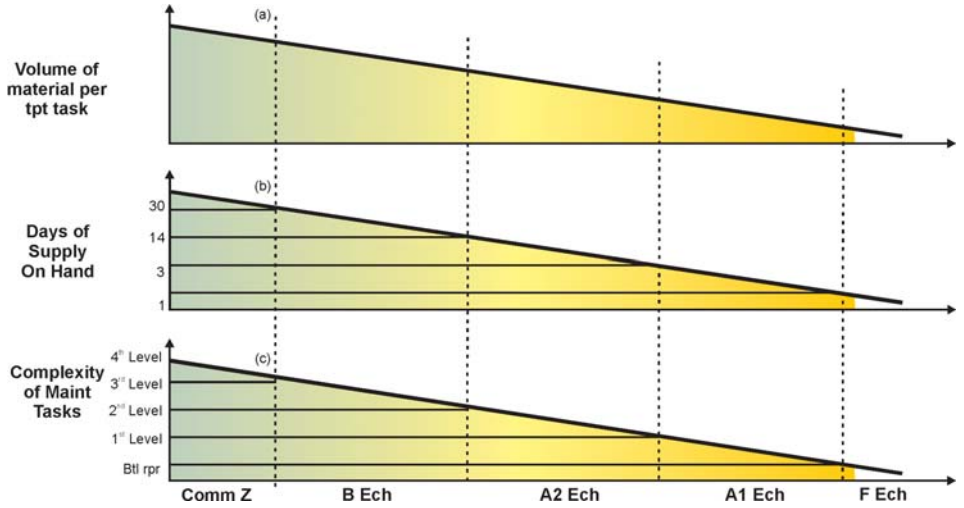

Figure 2: Sustainment tasks as a function of ground in the linear battlefield

As the ground in a linear battlefield is held and managed by a given organization, normally a manoeuvre element, that commander usually takes command of all other organizations that operate on the same terrain. Sustainment organizations are no exception, and consequently, the command and control of sustainment resources is highly decentralized, focused on the support to the parent organization. The flow of sustainment resources tends to be coordinated along a forward-rearward axis, and the sharing of resources between adjacent (flank) units or formations is exceptional. Finally, because a large portion of sustainment actions are conducted in areas of lower threat, day-to-day sustainment actions can be largely coordinated along a technical (J/G4) chain. This coordination is normally done independently from the operational (J/G3) chain of command, which is focused on the manoeuvre battle.

Sustainment in the Non-Linear Battlespace

In COIN operations, there is no defined FEBA, as the threat of insurgent activity is present throughout the operational area. The FEBA in Afghanistan is effectively right outside the Kandahar Airfield (KAF) gate, and surrounding every tactical infrastructure developed on the ground. Consequently, there is no single area outside KAF in which materials and resources can be moved about without a requirement for force protection. In the linear model above, it is as if all levels of support operations, from the Comm Z to the fighting troops, are now potentially operating in the same time and space, completely immersed in a potentially threatening environment. In the linear model sustainment operations can be seen as a carrot or core sample taken at the intersection of all sustainment echelons along a given line from the Comm Z to the F echelon. In other words, it is as if we were to look at the model in Figure 1 from the right, where the threat picture is high and unstable, and regroup all elements from the rear to the front into a solitary node, as shown in Figure 3.

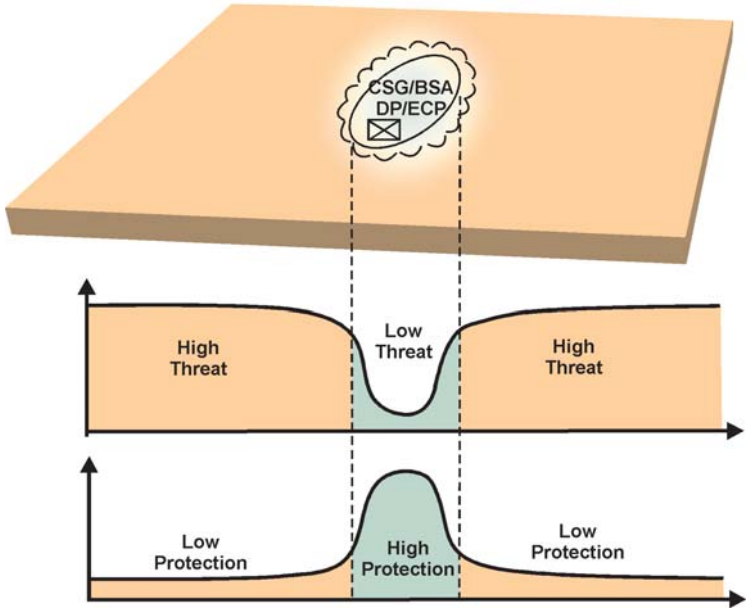

Figure 3: The node, immersed in a hotbed of enemy activity (e.g., KAF)

The establishment of a single node is essentially the way the Canadian mission in Afghanistan began. In KAF there are elements of every single echelon, all grouped into the same location (the forward mobile support unit (FMSU) meters away from manoeuvre battalions, and the exchange of services that would normally have been done in some DP or equipment collection point (ECP) is conducted in situ). More importantly, technicians are performing tasks across the entire spectrum of what used to be separated by echelons. The same technician, in this case, removes a box from the C130, a task normally occurring in the Comm Z, and delivers it to the soldier involved in the permanent fight only meters away from the front gate. The level of sustainment is not a function of the ground and the threat, but rather of time. Only with time and resources was KAF able to grow the infrastructure required of higher levels of support necessary to project force.

In accordance with the Afghanistan Campaign Plan, which sees an inkblot of security, governance and development expanding with the establishment of permanent tactical infrastructures, the Canadian contingent eventually established a second node, Camp Nathan Smith (CNS). Initially, the node was no more than a leaguer, containing support elements that would be comparable to the front echelons. However, with time and resources, the level of sustainment possible on the node grew to include a kitchen, a warehouse, a workshop and a medical inspection room (MIR). It had encompassed, using the linear terms, a union of support in the F-, A1-, A2 and even elements of the BSA. And because the area outside the gate was so unpredictably unstable, all exchange of resources (e.g., DP, ECP, casualty collection post (CCP) were also being conducted on the camp. Most importantly, the level of support offered was no longer based on lines. This is a solid indicator that the linear model of sustainment is no longer valid to describe the support concept in a COIN environment.

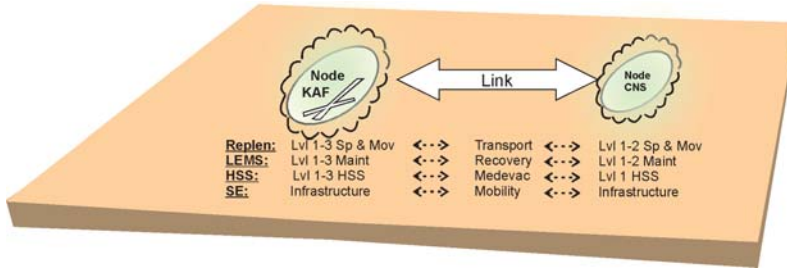

Figure 4: Sustainment tasks on nodes and links

With the addition of a second node, the Afghanistan battlefield was comparable to a hub and spoke analogy, as shown in Figure 4. The nodes, where the task force has been able to secure a piece of ground, permit the execution of tasks related to static production. For example, tasks in KAF ranged generally from levels 1 to 3, and those in CNS were normally limited o levels 1 or 2. There is no longer a requirement for echeloning of resources from one line to another, because the same resources in a given node can provide many levels of sustainment tasks. Fundamentally there are no more lines. Also, where resources are limited, a sustainment resource can easily be shared between several organizations operating out of the same node or even between adjacent nodes. This increases the requirement for coordination between units, suggesting that resources be more centrally controlled. This is quite different than the linear battlefield, where time and space negate the performance of tasks for different units, at different levels, by the same resources.

Sustainment operations within the links have taken on a complexity uncommon to the linear battlefield. Combat service support (CSS) soldiers now have to brave the same combat conditions as manoeuvre elements. Road replenishment is no longer in long, administrative convoys in the secure Comm Z, rather deliberate manoeuvre operations that have to be mounted and executed with the same tactical rigour as the combat patrol; hence the birth of the combat logistics patrol (CLP). The links could also be contracted to the Host Nation in the form of transport trucks, or as called in Afghanistan, "Jingle Trucks[1]", and tactical airlift. The advantage of contracting is that the contractors are able to travel between nodes with less danger, as they are difficult to recognize by insurgents as a threat. This is not the case in the linear battlefield where contractors are as vulnerable as soldiers as they get closer to the FEBA. As links are immersed in a pit of enemy activity, tasks tend to focus on the recovery back to existing nodes, or the creation of a temporary node on site to allow limited production type tasks in a secure environment.

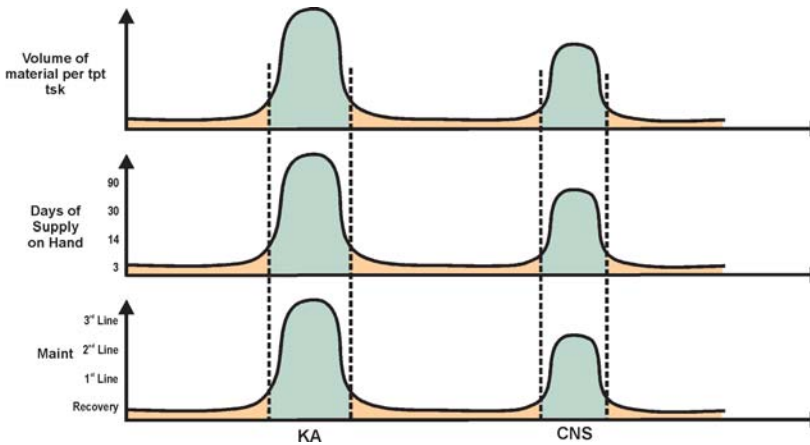

Figure 5: Sustainment tasks as a function of security in the non-linear battlefield

Comparison of the Sustainment Tasks

Let us take the scenario of two nodes and consider the application of the sustainment tasks, though respecting the same relationships as shown in the linear concept (Figure 2). As there is no longer a dependency on echelons, sustainment tasks can be fundamentally separated between those that are performed in nodes and those performed in links. Table 1 shows a comparison of tasks in each of the sustainment systems, in both the linear and non-linear environments.

System	Linear Battlefield		Non-Linear Battlefield	
	In the Rear (i.e. Comm Z)	**In the Front (i.e. A1 Ech)**	**In the Nodes**	**In the Link**
Replenishment - Transport and movement	- Large administrative convoys, rail and air transport, which are feasible only in a low threat environment.	- Small convoys, more agile, and more dependent on protection, firepower and concealment. - Integration in the manoeuvre plan.	Primarily Movement - Control, coord and preparation in view of transport, either through the APOD or for tactical lift from one node to another - In-transit visibility en route	Primarily Transport - Small manoeuvre patrols, requiring protection, firepower and STA assets - Integration in the manoeuvre plan. - Primarily CLP, contracted transport, tactical or contracted airlift[2]
- Supply	- Complex infrastructure for high volume warehousing	- Limited few days in order to ensure protection through mobility.	- The support covers the spectrum from IS to GS. - Commodities are accessed through links among any arrangement of nodes	- No supply task occurs in the links beyond what is stored in the vehicles, without the establishment of at least a hasty node (e.g.a DP).
Land Equipment Management	- More capable, static infrastructure permitting tasks of complexity and duration.	- Limited by technician time, based on requirement for frequent tactical movements. - Complex tasks are recovered to the rear through ECPs.	- Tasks are limited by the resources available in a given node and the priorities assigned to them.	- Recovery is similar to transport, except that it is generally rearwards, back to superior nodes. - Recovery ops are planned and executed according to priority.
HSS	- Solid infrastructure can accommodate more complex support.	- Limited to hasty field installations, and casualties requiring treatment of more complexity are moved rearwards through CCPs.	- Med support short of first aide is conducted on nodes. - Where infra is inadequate, the priority is evacuation towards more developed nodes.	- Emphasis is on first aide and casevac towards nodes with more solid medical infrastructure.
Personnel Service Support (PSS)	- Security support, pers admin, replacements and the rear link.	- Limited to disciplinary chain of command, chaplain services and graves registration.	- Security support, personnel admin, replacements and the rear link.	- Limited to the disciplinary chain of command, chaplain services and graves registration.
Sustainment Engineering (SE)	- Establishment of permanent infrastructure that is unfeasible on the front lines.	- Those tasks oriented towards establishment of hasty infrastructure for force protection, mobility and counter-mobility	- Establishment of permanent infrastructure that is unfeasible on the front lines.	- Those tasks oriented towards establishment of hasty infrastructure for force protection, mobility and counter-mobility

Table 1: Comparison of Sustainment Systems in the Linear and Non-Linear Battlefields

Table 1 further illustrates that the level of production in the nodes is largely comparable to that in the rear lines. Similarly, the tasks that occur in the links are synonymous with those that are conducted on the front lines or even in the middle of enemy territory. Link tasks have to be treated with the same rigour and attention as deliberate combat operations. Sustainment activities in a COIN environment are so different between links and nodes that tasks themselves seem to separate along links and nodes. Recovery, for example, is a task that is really only conducted in the links, whereas maintenance must be in some form of node. Movement is a link task, whereas transport is more of a node function. Thus it is concluded that sustainment organizations, and their command and control structure, should be based on their operation either in links or nodes.

The difference between the two environments essentially comes down to a question of time and space. In the linear model, there are significant distances between areas of high threat and those where a lower threat can permit higher levels of sustainment production. However, in the non-linear context, the operational zone is highly compressed, reducing the requirement for echeloning of services. In a single tactical bound, one can now find amenities and services comparable of those that would be hundreds of kilometres away from the front lines. The following table provides a summary of those comparisons.

Linear Battlefield	Non-Linear Battlefield
Long distances between organizations providing different levels of support.	Many levels of support are available in the same location.
Units are spread out adjacent to one another.	Units are co-located with one another.
Sustainment is specialized at a certain level based on the threat in a given area.	Sustainment is highly varied to respond to a myriad of requirements in a given node.
Sustainment resources are dedicated to specific organizations.	Sustainment resources can be used to offer support to all units in a given location.

Table 2: Summary of Comparisons between Sustainment Systems

This compressing of the lines of operation into specific points offers possibilities whereby resources can be shared a sideways fashion between parallel organizations. Taking this to the next step, where resources are limited, and resources must be managed at certain locations it becomes critical to encourage this sideways movement of support, sharing among any and all nodes in the battlespace. In the following section, it will be shown that this concept leads to the distribution of resources in a fashion that can be compared to that of a network.

The Sustainment Network

OP ATHENA Roto 4 has progressed since the establishment of the first two nodes with the aim of expanding the inkblot of security throughout the Kandahar Province. The Joint Task Force Afghanistan (JTFA) did this through the establishment of a significant number of nodes and links, stretching the sustainment requirements over a greater and greater area. It became necessary to establish a support concept whereby resources could be shared and distributed from node to node depending on the formation commander's intent. Let us use the following representative model for discussion.

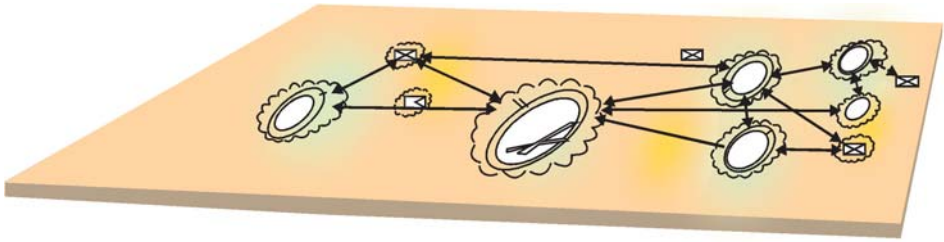

Figure 6: A representative sustainment network in the non-linear battlefield of Afghanistan

The sustainment concept for the non-linear battlefield is motivated not by the distribution of resources on the ground; rather by the fluidity by which resources can move between nodes, in a network of support. Where operations are conducted, there is a natural pull of additional support.

Consequently, reallocations are provided from adjacent nodes where resources may be in greater abundance. Ideally, for this to function, one must know where the support is located, where it is required, and have the will and authority to move the resources around in accordance with the commander's intent. This requires a significant amount of centralized coordination. Also, this centralized coordination must have the authority to conduct the link tasks in synchronization with the manoeuvre plan. During OP ATHENA R4, this task fell on the NSE Log Ops, in close coordination with the Provincial Operations Centre: the J4 for the planning, coordination and execution of node tasks, and the J3 for link tasks.

TI	Units	Sustainment Organization	Infrastructure	Commodity Replenishment	Dependency	Management Effort
Leaguer, Artillery Manoeuvre Area (AMA) or Drop Zone (DZ).	- A sub-organization from a unit secures ground for a temporary task	- IS elements attached to the unit	- Temporary, mobile, and implemented without SE.	- Carried by unit	- Cannot provide support to other nodes	- Force Protection - Rapidity of deployment and extraction
Strongpoint (SP)	- Elements from any number of units. - Sub-unit size	- IS elements attached to the unit	- Temporary infra oriented towards FP	- Tracked by unit - Pushed by unit by CLP, airlift or CDS	- Cannot provide support to other nodes	- Force Protection - Holding ground
Patrol Base (PB)	- Elements from any number of units.	- A sustainment det manages CS services	- force protection and limited sustainment tasks.	- Tracked by CSS det - Pushed by Log Ops by JT or CLP	- Stock piling of commodities can be envisioned, so can therefore replenish other nodes.	- Force Protection - Service Support
Forward Operating Base (FOB)	- Elements from any number of units.	- A sustainment det manages CS and limited GS services	- Complex sustainment infra, albeit temporary. - SE resources are resident to maintain infra as required.	- Tracked by CSS det - Pushed by Log Ops by JT or CLP	- Stock piling of commodities can be envisioned, so can therefore replenish other nodes.	- Service Support - Force Protection
Camp	- Elements from any number of units. - Unit sized	- Last level of integrated sustainment organization	- As opposed to a FOB, the sustainment infrastructure in a camp is permanent.	- Tracked by sustainment organization - Capable of local and national procurement	- This is the first level that can accommodate surges of manoeuvre units without a reliance on external resources.	- Service Support - Commodity build-up - Force Protection
Support Base (SB)	- The SB is the highest level of TI, in that it provides a window of sustainment with strategic levels.	- Theatre-level sustainment coord capabilities - Technical authorities for sustainment tasks	- Other infrastructure may be similar to that found in a camp, just to greater complexity.	- Tracked nationally - Replenished by operational-level depots	- In most cases, a single "theatre" SB will exist that provides in- and out-flow of resources with Canada.	- Service Support - Maintenance of Rear Link - Commodity build-up - Force Protection

Table 3: Comparison of Sustainment Systems in the Linear and Non-Linear Battlefields.

The Hierarchy of Nodes

A few observations can be made to facilitate the planning of sustainment to combat operations. First of all, the level of service in various nodes is inherently progressive. The smallest of nodes can literally be a 5/20 drill,[3] which is essentially the first step in securing ground for the conduct of a task. Of course, nodes can vary in size all the way up to the very significant infrastructure seen today in KAF, where 13,000 people live and work. During OP ATHENA Roto 4, the order OP ZERIN ZMARAY (Ref B) defined the level of support in a given node as a function of the disposition of units on a piece of ground. The order called nodes Tactical Infrastructures (TI) and defined a hierarchy as summarized in Table 3. Arguably, these concepts could potentially apply to any non-linear theatre environment.

Generally speaking, support is provided from superior nodes to inferior ones. For example, a supply detachment in a PB will likely receive support from an adjacent FOB or camp, as opposed to receiving from a SP or leaguer. One could say that a certain dependency exists between nodes of equal or greater levels of support. There are nonetheless limits; OP ZERIN ZMARAY also showed that only nodes of a certain level of support could be used as dependencies. Column "Dependencies" of Table 3 shows that TI under that of PB do not have the capability to stock materials in sufficient quantities in order to replenish other nodes without additional assistance. Nonetheless, one can use this general rule of superior node dependency in order to design sustainment architectures, and an example of this is shown in Figure 7.

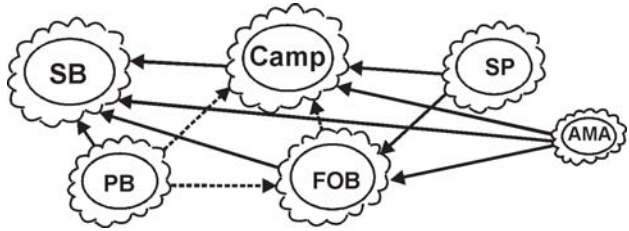

Figure 7: The rule of superior node dependency. The arrows denote dependency on superior nodes.

There are exceptions to the rule of superior node dependency, as it would be feasible to see the reduction or even dissolution of an inferior node in order to boost a node in support of a priority operation. Also, if specialized or high value service exists in another location, such as a mobile repair team (MRT) for a certain type of vehicle, then that service can be re-tasked from an inferior node. Nonetheless, superior node dependency can be considered a general rule of thumb for sustainment planning.

We can make an analogy of the sustainment network to the Internet. The nodes are equivalent to the hierarchy of ports, switches, routers, hubs and servers in order of increasing capability to transfer information. Links are comparable to trunks, wires, or wireless connections that bring a given service to the users on the nodes. When an Internet user submits a request, it is processed through the switch. If the information requested is available within the switch's internal network, then the information is rendered. Otherwise, the request is pushed to the router, to hubs and servers until such time as the information is located and pushed back through the architecture to the user. Similarly, when an infantry soldier submits a support request (e.g., a repair request), it is processed initially by the CSS det in his PB. If the support is within the control of the CSS det, then the request is approved, and the service is rendered (i.e. vehicle is repaired). Otherwise, the request is further dispatched between FOBs, camps and SB until the resource is located and pushed back through the network to the user. There is

an understanding in both networks that a high degree of visibility and control is required high up in the hierarchical chain (at servers or in the SB), in order to locate the service or the information and push it where it is required.

Ownership of the nodes

Another consideration for comparing the various levels of nodes is the responsibility for node management. Typically, a single organization should have overall command of a given point on the ground in order to facilitate defence planning and coordination. However, it could be argued that node command responsibility should be matched to the nature of the effort required for node management. In the case of a leaguer or SP, for example, node management is predominated by force protection and security. The commanding organization would arguably be combat arms, as they retain the expertise for protection and security tasks. On the other hand, node management activities in a FOB or a camp could be largely predominated by service support issues (garbage removal, toilets, showers, food services, etc.). The more complex infrastructure requires attention that could eventually exceed the effort required for force protection. Consequently, it would be logical that the overall commanding organization be a sustainment one.

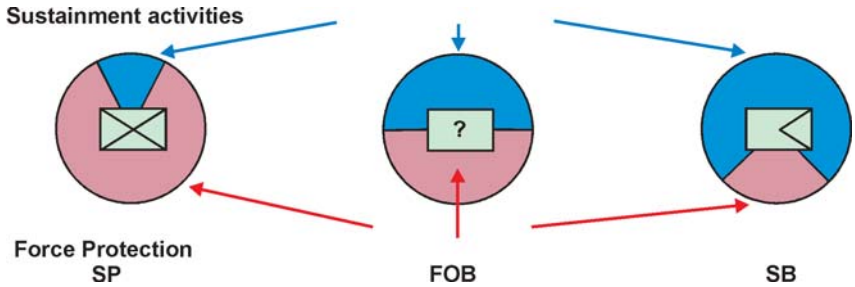

Figure 8: A comparison of the ratio of management effort between sustainment and force protection activities for three levels of tactical infrastructure.

During OP ARCHER R4, this was largely true. The command of KAF, at least the Canadian portion, was an NSE responsibility, including even the management of the force protection elements. The command of leaguers, SP and PB remains with the manoeuvre units. Contention arose during discussions about the command of FOBs and Camps, which was originally assigned to the Battle Group (BG) and the Provincial Reconstruction Team (PRT). This had the negative effect of fixing the sub-unit headquarters to the ground to manage largely sustainment issues. Company Sergeants-Major, as Camp SM, had to invest time and effort on sewage and garbage issues in lieu of concentrating their efforts on the support of the next operation. At one point, the BG CO made a request to the NSE CO, to please take the FOBs, alluding that the NSE take ownership and command of both sustainment issues and force protection of each FOB, and be allocated resources accordingly. The BG companies would then only be tenants on the FOB, until deploying on the next operation. However, despite efforts to liberate the command and control and administrative resources required, the NSE organization was not sufficiently endowed to take on such a task. In the end, the manoeuvre units retained the FOBs, and they absorbed the impact on their operations.

The Deployable Sustainment Detachment: The A3

On both the linear and non-linear battlefields, there are situations in which sustainment at a given location must be surged in order to support a priority operation. In the linear battlefield, this led to the deployment of the forward logistics group (FLG),

which was essentially a task-tailored second line CSS package from the service battalion in the BSA. In the example in Figure 9, a break in sustainment flow between the BSA and A2 echelons requires the deployment of the FLG onto the admin coy echelon in order to complement the support in that location. The FLG remains an unbreakable entity and separate to the supported organization, and technicians conduct levels of support concurrent with the second line. It should be noted, the technicians would be generally unfamiliar with the A2/A1 environment, as well as the personnel in the Admin Coy.

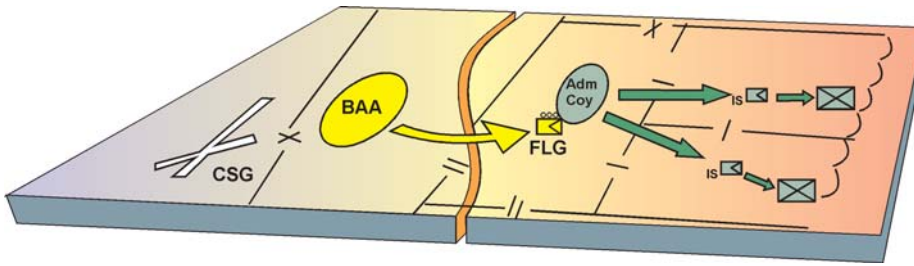

Figure 9: The Deployment of the FLG in the Linear Battlespace. Yellow denotes elements belonging to the service battalion, and green denotes elements belonging to the manoeuvre element (i.e., the BG).

In the non-linear battlefield, where resources are no longer dedicated to a given line of support, the FLG concept does not exist. When a given operation is planned at some distance from existing TI, what is required is not a dedicated second line organization rather a means to project sustainment resources of both 1st and 2nd levels. These resources, which may originally be static, must become mobile to support a specific operation over a relatively short time. The A3 is exactly that. A task-tailored organization, including a command and control element, formed from adjacent nodes in order to either reinforce the logistic elements in an existing node or in some temporary one that has been established. Because these resources perform similar sustainment tasks to the supported organization, they can integrate into and reinforce the sustainment concept already in location. The A3 can not only be used to control sustainment elements already with the deploying manoeuvre unit, but will also be used to tap into additional sustainment resources in adjacent nodes as required.

As opposed to the A1 and A2, the A3 is not an echelon, but in fact an integration of elements of the sustainment network in the support of a manoeuvre plan. The A3 brings to the manoeuvre commander a capability of sustainment effects, similar to how an artillery forward observation officer (FOO) brings fire support effects. When the manoeuvre commander specifies the effects that he requires the FOO to bring to bear on the target, the FOO coordinates resources either within his battery or by other fire support resources available (reinforcing regiments, attack helicopters, close air support, etc) to achieve that effect. The commander need not concern himself with the manner in which it is delivered. In the same manner, a commander has but to specify to the A3 the sustainment effect desired—a recovery action, a replenishment of manoeuvre elements (e.g., a DP or a Com Pt). The A3 commander provides from either the resources under his tactical command, or by coordinating through Log Ops the application of resources from adjacent sustainment nodes, in order to achieve the effect. The manoeuvre commander need not concern himself with the details.

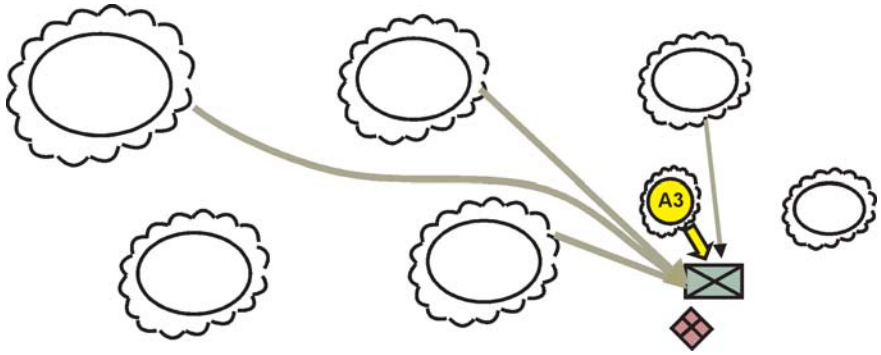

Figure 10: The Deployment of the A3 in the Non-Linear Battlespace. In this case, the manoeuvre elements (in green) are engaged in the fight, and all coordination of integral and close support is provided by the deployed A3.

In the course of OP KHAIR KOWAI in September 2007, an A3 was deployed in support of a BG operation for the seizure of Mount GUNDAY GHAR. The A3 consisted of a Bison with C4ISR[4] capabilities, three force protection vehicles (RG-31s), several pallet loading system (PLS) vehicles and recovery resources. In the course of the battle, the A3 deployed CLPs from within its organization in order to replenish manoeuvre elements and to recover damaged vehicles along the main axis. Also, by providing frequent situation reports to Log Ops, the NSE could predict materiel requirements minute-by-minute and project CLPs from KAF in order to maintain support continuity. The A3 deployed for four days, the time required to take the mountain, before dissolving back into the other nodes.

Following the battle, the BG expressed its extreme contentment with the A3 concept, as it greatly assisted the manoeuvre commander in the development of his own sustainment plan. For subsequent operations, the BG made frequent requests for the A3. However, the NSE CO had to explain to the BG that the deployment of the A3 could only be sustained for limited periods, as the resources had to be generated by adjacent nodes. The A3 are not often required as most operations take place within 10 km of any node. This closeness is conducive to a very small A1 echelon, and all other support is only called upon as required. The second tactical bound is essentially in the FOB itself. There is no requirement to augment manoeuvre elements, as they are protected by virtue of their mobility. In this context, it was only in critically important operations that the A3 could be deployed, where a reduction of support could be accepted elsewhere, otherwise the impact was too great. Nonetheless, OP KHAIR KOWAI demonstrated undisputedly the relevance and effectiveness of such a concept in the non-linear battlefield.

Sustainment Command and Control

The incorporation of the network model into sustainment doctrine would be useful to the planning and coordination of COIN operations. Where operations are more frequently occurring in these environments, the establishment, organization and equipment of the sustainment organization must be configured accordingly. Concepts such as the Admin Coy, the form of the J4 Staff and S4 staffs in the units, support relationships, and the sustainment organization and establishment should perhaps be revised with this concept in mind. The incorporation of this more representative model

for sustainment doctrine will permit a more comprehensive planning effort for future operations.

Functional and Integrated Command and Control

Though the administration and management of nodes may vary from one organization to another, resources lodging on the node tend to maintain command, control and administration along functional lines. Sustainment detachments deployed on nodes are most effective when pooling their resources together in a collective approach to sustainment, while providing service generally to lodging units. It would be inefficient to consider the establishment of separate kitchens, medical stations and maintenance detachments for each unit that has a section sized organization deployed in a given node. Even sustainment organizations controlled by units other than the NSE, be they temporary or permanent attributions, tend to combine their efforts with other in-situ sustainment detachments to provide service generally to all lodging units. The combination of effort of collocated resources can lead to better success in achieving priorities at formation level.

The mounting and initial establishment in a non-contiguous theatre would likely follow the same logic. Where the organization is deployed across few, larger nodes, the chain of command would consequently follow functional lines, and the employment would be coordinated largely on a technical level. As development progresses, manoeuvre units establish nodes across the sustainment network, each requiring a task tailored sustainment detachment. The generation of these integrated sustainment teams (IST) can only be coordinated centrally by Log Ops, as the functional Commanders lack the situational awareness with supported units. However, Log Ops neither commands nor administers, so some parallel command structure is required in order to manage resources that are deployed in the various nodes. IST, which may be at section or platoon level, can be grouped geographically into sub-units in a completely separate command structure. The functional chain of command must still exist, in order to coordinate and advise the commander from a technical or functional point of view.

As was suggested earlier, COIN operations could lend themselves to the division of organization between nodes and links. Consequently, it could be possible to generate a separate link organization that would be responsible for the tactical movement between the FOBs. It would have elements of force protection, transport, recovery, medevac and mobility resources that would focus on the conduct of manoeuvre operations, all coordinated by Log Ops along the operational chain. Figure 11 shows the difference between the functional chain of command for the technical generation of sustainment effort, which is not at all based on any point in time or space, and the integrated chain that is responsible for the application of sustainment in specific times and spaces.

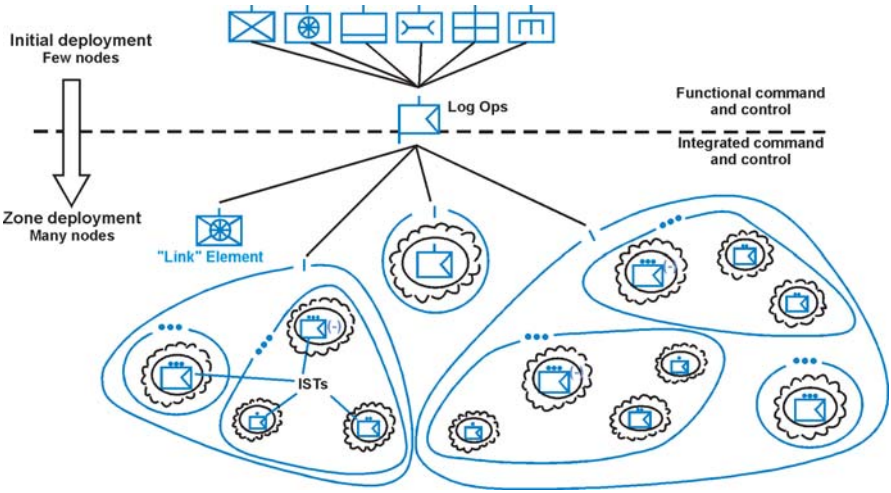

Figure 11: The functional and integrated chains of command

Logistics Operations in COIN

Contrary to the linear service battalion in the BSA, Log Ops in the COIN environment coordinates much more than only second line support. The cell becomes responsible for the constant shift of resources between functional and integrated roles, across all lines of support in the area of responsibility (AOR). When manoeuvre elements deploy, Log Ops must have the flexibility to develop a sustainment plan that sees the attribution of appropriate IST in an IS role. When the unit returns to the nodes for reconstitution, then Log Ops reassigns the resources back along the functional chain of command, back to a more general support role. The role of the functional subunit commanders is nonetheless the key throughout the process in advising the overall commander on the capabilities resident in their organizations, in order that the most appropriate teams are deployed. In a sense, Log Ops coordinates the constant reattribution of resources between functional subunits as sustainment generators, and a separate integrated chain of command as the sustainment employer in support of deployed operations.

The task of Log Ops has also increased with respect to the conduct of link operations, which must be thoroughly integrated in the manoeuvre plan. CLPs are elements that provide not only the Sustain combat function, but also Sense and even Act. Sustainment operations have taken on a moreover operational flavour, and consequently have to be coordinated by the Ops (J3) staff, as opposed to the Log (J4) staff. Because CLPs are working in exactly the same areas as the manoeuvre elements are conducting Act operations, Log Ops now has to synchronize with all other manoeuvre elements through the higher headquarters. Log Ops also requires an intelligence cell (S2) to provide the most up to date and appropriate intelligence picture to the outgoing CLPs. The S2 is required to process and synchronize the significant “red” (enemy), “white” (civilian), “brown” (environmental) and “green” (obstacle) intelligence that is being produced by the patrols for the protection of all deployed elements. CLPs have to be synchronized with the Intelligence Surveillance Target Acquisition and Reconnaissance (ISTAR) plan in order to coordinate requests for information (RFIs) from the higher headquarters and process the information being collected. In short, the NSE requires an operations centre similar to any other

manoeuvre organization, in addition to the coordination capabilities associated with specific support services.

Limited Resource Management

In the linear battlefield, resources are attributed to units that are spread out laterally on the ground, and it is unfeasible to consider the sharing of resources between several manoeuvre units, for day to day support. However, COIN operations often see the collocation of units in a single node, which offers possibilities about the more efficient use of limited resources to support many organizations. By virtue of their proximity, it is possible to consider the sharing of resources (i.e. integrated sustainment teams) among all units represented in a given node. On the other hand, it would be feasible to have separate sustainment organizations for each of the resident units. At the extreme, one could consider the deployment of dedicated kitchen facilities, fuel farms and medical stations, each for platoon-sized elements of the BG, Operational Mentor and Liaison Team (OMLT) and PRT that are collocated on a given FOB. However, in this day of extremely limited resources, and the emphasis on the deployment of manoeuvre elements, this is likely difficult to justify. Nonetheless, these are all solutions that are feasible in this non-linear model.

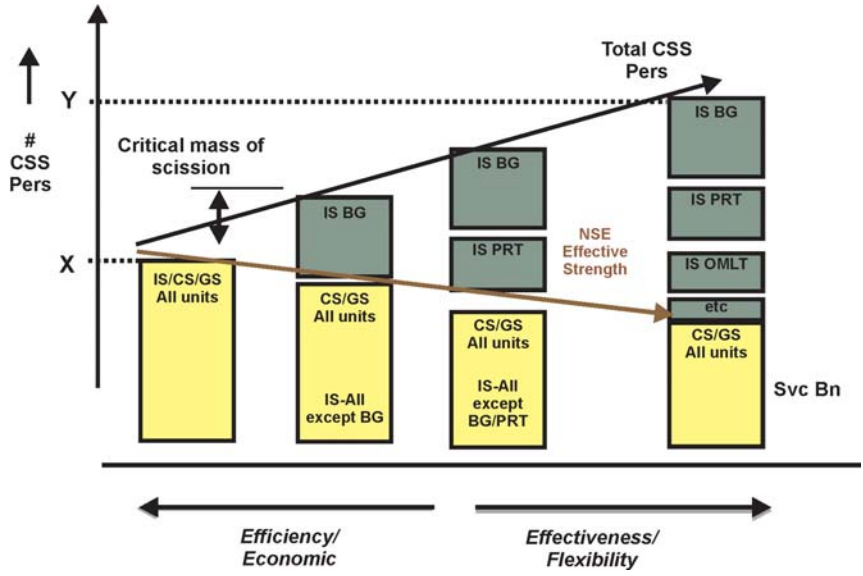

Figure 12: The spectrum of sustainment resource attributions, as a function of the number of CSS personnel required to complete a given support concept.

As one moves from left to right in the Figure 12, the creation of IS structures within separate units is not as simple as the cleaving of resources from the parent sustainment organization. The creation of a sustainment sub-organization in the manoeuvre unit requires an additional overhead in the form of command and control, as well as resources required to manage the addition burden of coordination at the formation level, as mentioned above. There is a critical amount of resources that have to be injected into the sustainment system in order to scission off a separate IS organization. This may be called the principle of *scissiparity*[5]. In the end, the numbers of the parent sustainment organization decrease, but with an overall increase in total sustainment resources. A very clear relationship can be seen between the sustainment resources required and the

number of dedicated IS organizations. It could be said that operations on the left make efficient or economic use of limited resources (quantity "X"), and on the right, the additional resources (quantity "Y") provide flexibility to manoeuvre commanders making them more effective on the ground.

Somewhere between the two extremes, there are solutions that include the attribution of IS organizations to single units on the battlefield, particularly those that have very specific requirements. The construction of a dedicated capability must, however, take into consideration all dependencies with other sustainment nodes. Take the following scenario that we have already seen.

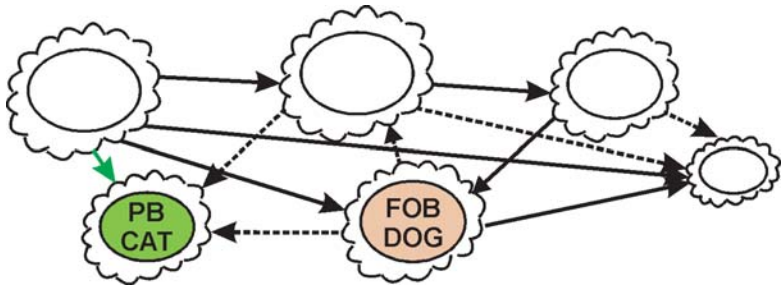

Figure 13: The creation of a dedicated IS capability to a unit. The node and link in green now becomes the responsibility of a single manoeuvre unit.

Let us presume in this scenario there are elements of all manoeuvre units deployed in each node, as in Afghanistan. If sustainment resources were in sufficient abundance to consider the creation of a dedicated IS capability to the BG, for example, then the employment of these elements could be considered to take on the responsibility of certain links and nodes that were previously under the NSE purview. If we were to consider, for example, the assignment of node and link support for FOB DOG, we would run into an interesting situation for that unit. Indeed, the FOB is also so interdependent with other nodes in the battlespace, so there would be constant requirement for transfer of personnel and materiel between the BG and the NSE, in order to ensure continuous support forward to the smaller infrastructures. However, a reasonable solution would be the BG's allocation of node and link support for PB CAT because it is fundamentally dependent on a single line of support from the Camp. In surge operations, the NSE will still have the flexibility to reallocate resources from other FOBs. However, the daily sustainment concept will be built on a single link that would be supportable by a BG IS element.

There is a catch to this relationship. By taking on the responsibility for the PB, including the kitchen, fuel farm, medical station and supply depot, the BG is also taking on the responsibility for the support of all other lodging units, including the OMLT, PRT, or even resident NSE resources. This poses an interesting dilemma, in which a single unit now has to incorporate in its planning the intentions and limitations of several other units in the task force. Essentially, by taking on the IS element, they are also taking on a staff responsibility at formation level. Consequently, the creation of an IS piece must essentially include more intimate planning and coordination with the higher headquarters and flanking units.

A considerable amount of thought has yet to be put into defining the scope of this support concept for a non-contiguous battlespace, as it will ultimately have an effect on the establishment, organization, equipment and training of all elements within the

sustainment picture. It will be necessary to look at streamlining the sustainment tasks, because there continue to be many issues with the distribution and optimization of support resources.

Conclusion

The current Canadian sustainment doctrine, while entirely relevant for the linear battlefield, is based on a number of premises that are no longer applicable in a non-contiguous battlespace such as in Afghanistan. First, the sustainment concept and organizations are based on the ground and its assumed state of security. By virtue of the time and space that are separating deployed elements on the battlefield, sustainment organizations' tasks, structure and chains of command are separated into specific echelons that vary from the most secure areas of the battlefield, in the rear where increased security permits the development of complex support infrastructure, to the front where mobility and force protection limit the complexity of support possible. Another premise is the availability of sustainment resources that can be dedicated to each echelon, and that every subunit, unit and formation has a dedicated sustainment organization. Finally, sustainment resources themselves are limited to specific, specialized roles according to their organizational assignment. In the non-linear environment of Afghanistan, the battlefield is based not on the ground but on the establishment of secure nodes between which sustainment tasks are shared. Finally, in order to facilitate the efficient use of resources, sustainment is best centralized under a single chain of command.

However, in studying the non-linear environment, certain sustainment principles remain valid, including the relationship between security and production and the requirement to preserve the sustainment tasks. In the non-linear battlefield, these tasks break down logically into those performed in nodes and links. It is shown that because the nodes can provide areas of security equivalent to former rear echelons, numerous lines of support can be applied in the same location, by the same resources to multiple units, which increases the requirement for flexibility at both soldier and staff levels. Because links tasks are conducted in insecure areas, they must be treated as deliberate manoeuvre operations and coordinated along the Ops chain. . Central sustainment coordination has become more complex, as Log Ops must literally plan from the operational level all the way down to the individual soldier. Consequently, we see the requirement for planning, intelligence and coordination capabilities where the establishment has yet to develop them..

Sustainment in the non-linear environment is now based on a network concept of support shared between secure nodes. These nodes have a certain hierarchy based on the time and resources available at a given point and a rule of superior node dependency can be established for planning. In this resource-based environment, we have shown that resources can be assigned to separate units, but at the cost of more overall resources and additional coordination at higher levels. This coordination has been shown to be equivalent to that of fire support, as sustainment effects are now as indistinctive as fire effects on a target. The FOO equivalent in the application of these effects is the A3, which can provide punctual augmentation to a sustainment plan in support of a manoeuvre plan.

This article is not intended to replace current doctrine, as the linear battlefield model is still highly relevant to those environments. Rather, it seeks to add a non-linear dimension to the current doctrine for those theatres such as Afghanistan, where the linear model fails to describe the support concept. In the future, organizational planning for deployments must consider the environment in which sustainment is to be executed, and tailor the establishment, structure and equipment appropriately. It is hoped that this

paper will raise questions and discussion by the doctrinal experts to ensure that our deployed troops receive the best sustainment support possible.

About the Author ...

At the time this article was written, Major Devon Matsalla was the Operations Officer of the Canadian National Support Element for Joint Task Force Afghanistan Roto 4. His previous military experience includes 12 years as an Artillery officer before transferring into the EME branch in 2004. He is now employed as the Canadian Field Artillery Equipment Manager based out of Gatineau, Quebec.

Endnotes

1. In Afghanistan, contracted transport is called "Jingle" Trucks (JT), due to the cultural tendency of drivers to decorate their trucks. JT have the convenient ability to blend into the civilian traffic and therefore rarely require additional force protection.
2. Contracted civilian airlift in Afghanistan is often called "Jingle Air", with reference to its contracted road counterpart.
3. A 5 and 20 drill is a standard procedure carried out on every halt, in which visual inspections for threats or hazards are conducted within a five and then 20-metre radius of the vehicles. See B-GL-005-000/FP-001, *Convoy Operations Tactics, Techniques and Procedures* for more detail.
4. Command, control, communications, computers, intelligence, surveillance and reconnaissance.
5. Scissiparity is a biological term describing the process by with a single-celled organism must obtain a certain critical mass before it can separate into two separate organisms.

TERRITORIAL BATTALIONS: CAN THEY WORK?

Sergeant Kurt Grant

The time has come, to produce provincial regiments of armour, artillery, and infantry to fit the two-corps establishment. …The great snag in this is that we run smack into the Regimental System and that there will be much heart breaking, gnashing of teeth, and political pressure. …Better to endure an upheaval now and get the necessary reforms under way.[1]

Major-General Christopher Vokes
1952

Introduction

Since the release in May 2005 of Canada's International Policy Statement, *A Role of Pride and Influence in the World*, there has been much rhetoric about what role the Militia is to play in times of national crisis. As is to be expected, the Regular Force has one view, the Militia another, and it seems t'was ever thus. Though their relationship has at times been rocky, following 9/11 the two forces have come to something of a truce as they each settled into their respective defence roles. The Regular Force can be seen as the "away" team providing battalions for rotations abroad. The Militia on the other hand is the "home" team, providing augmentees in support.

But times change. The actuality of world terrorism and the recognition that terrorist targets are not limited to the battlefield have forced a new reality upon all of us. The Regular Force reliance upon Militia augmentees has softened the relationship between the two forces as each develops a greater understanding of the other.

Fifteen years of focusing on providing augmentees for foreign service has, however, exposed a critical gap in the defence of the nation. Who will respond in times of crisis at home? In the past this was always the purview of the Militia. But recent history has shown that it was the Regular Force that stepped up to the plate first, albeit with heavy Militia augmentation.

This raises the issue of formalized roles. With no forward edge of the battle area (FEBA), the need is to activate a quickly mobilized, trained force. But the Regular Force cannot do it all. Already critically under-manned, it would appear that the new role of territorial battalion is tailor-made for the Militia.

The 2005 Policy Paper hinted at the creation of a four new Regular Force Rapid Reaction Battalions supported by a territorial response capability in twelve cities across the country. All indications are that this response capability will be the responsibility of the Militia—though nothing has been formalized. To meet this need, "the Land Force will review the current Reserve unit structure in each named location with a view to grouping and/or amalgamating units, as necessary."[2] But little else has been written on the subject.

Since there is no clearly articulated plan, rumours abound. Most are pure speculation built around tiny snippets of information and much conjecture. Others however, are fuelled by fear. The Militia's encounter with the Regular Force's first

attempt at Reserve Restructuring in the late 1990s led to a deep-seated distrust of institutionally enforced change without consultation.

That change is coming to the Primary Reserve is inevitable. Territorial battalions are a logical response to a legitimate need. But there is a decided lack of information on this subject, and because of that, there is much fear. The purpose of this brief article therefore is to examine this issue and suggest ways in which territorial battalions may be instituted without causing undue institutional burden. It is hoped that this article will also stimulate conversation on the matter.

History

When discussing the issue of territorial battalions, it is important that we understand exactly we're talking about. A "territorial battalion", in the Canadian usage of the term and for the purposes of this article, is a battalion raised from a region or "territory" of the country. Its purpose is to respond to a domestic natural disaster or other emergency. The term "territorial army," which sometimes is mistakenly used, is a British term referring to their version of militia. In the United Kingdom the Territorial Army (TA) is the principal volunteer reserve force of the British Army, and is composed mostly of part-time soldiers much like our Militia. The current flurry of activity around this idea of territorial battalions stems from the Conservative government's Canada First Defence Strategy paper released in 2005. The paper outlined the creation of "territorial defence battalions" that would react to domestic emergencies such as natural disasters or a terrorist attack.

On the surface, and in concert with a long list of promises for defence spending, this would appear to be a reasoned and measured approach from the government to the seemingly unending stream of natural disasters[3] and overseas commitments. While the government Strategy Paper promised their creation, it was short on detail and little has actually happened. But is the creation of these battalions really a new idea, or is it an old one repackaged?

The answer to this question is that it is an old idea. Though not formally called territorial battalions, the practice of organizing a battalion around a corps of regular soldiers has, in fact, been around since the beginning of Canadian military history. During the War of 1812, for instance, the garrison at Prescott along the St. Lawrence housed a British force of approximately 150 regulars. This was augmented by two militia companies of 100 men each, and was supported by additional militia from Stormont, Dundas, Glengarry, and Leeds counties. For the battle of Ogdensburg, which occurred in February 1813, battalion strength was approximately 550 soldiers. Assembling a battalion from local militias is a practice that continues today. For evidence of this, one need only go out on a weekend brigade exercise, or the annual summer concentration, to see how members from various units are combined to form fighting companies.

A variant on the theme can be seen during the First World War when the practice changed somewhat. Instead of sending formed regiments, Canada chose to raise "battalions of volunteers" from a "territory" or "region" of the country, thus, in essence, creating territorial battalions. Indeed, Canada would eventually send no fewer than 250 such battalions overseas using this system. As a caveat to this statement, it is recognized that the size of the "territory" varied with each engagement. The Boer War, for instance took in people from across Canada, while later engagements reduced the size of the territory from which it drew soldiers to as small as counties and townships. In reality, apart from the Second World War experience, it can be argued that forming battalions from soldiers in a region was Canada's preferred method of raising an army to fight her domestic and foreign engagements—a Canadian way of war if you will.

Following Korea, the advent of tactical nuclear weapons changed the complexion of warfare around the world. In response, Canada changed its emphasis away from the battalion of volunteers approach.[4] Instead, in anticipation of a "come as you are" engagement, it relied on standing regular forces pre-positioned in Europe. The Militia, for a long time the primary military force for Canada, felt abandoned by this new emphasis on the Regular Force. This feeling was further compounded when it became clear in the late 1950s that the government intended, under the guise of National Survival, to re-role the Militia as the cleanup crew following a nuclear war.

Though no actual reorganization occurred, the fallout from the Kennedy[5] and Anderson reports[6] brought home the stark realization that Canada's approach to her military was about to change. The "peace dividend" first promised in the 1964 White Paper on defence, coupled with the unification of the Regular Force, reinforced the fact that the military was going to take a back seat to social issues. Although at the operational level the CF trained for nuclear and conventional warfare alongside allied forces, at the highest governmental levels the general view was that this involvement bought Ottawa a "seat at the table." In general, this approach to defence policy enjoyed broad public support throughout the Cold War.[7]

The practice of Militia augmentation on exercises and overseas deployments slowed to a trickle and could be measured in tens of personnel rather than hundreds. The regular battalions, after all, were fully manned. Bringing Militia soldiers along on exercise meant that someone had to be left behind, a practice that was not well received amongst the regulars. The gradual decline in funding for the military culminated in an attempt in 1987 to increase the military's effectiveness without spending any new money. To this end the government attempted to resurrect the territorial battalion concept with the creation of the 10/90 battalion. Billed as the Total Force concept, the 10/90 battalion saw an infantry unit in each regular force regiment established with approximately 10 per cent of its personnel being full-time regular soldiers, while the remaining positions were filled by reserve force soldiers from affiliated units in the region. While the sudden shift in the global dynamic of the late 1980s played large in the demise of the 10/90 battalion concept, in reality the 10/90 battalions lacked whole-hearted support from the Regular Force. Without the necessary funds and equipment to ensure success, they were doomed from the start.

With the ensuing end of the Cold War, and the fall of the Iron Curtain, the role of the CF seemed to be in jeopardy. Canada withdrew from Europe while "declining budgets put increasing pressure on the Department to reduce overhead costs."[8] The solution was to refocus its efforts on a new and seemingly less expensive role—peacekeeping. Peacekeeping, however, proved to be far more complex than anyone anticipated. Where once Canada deployed fewer than 2000 peacekeepers at any one time that number now increased significantly. To meet its successive peacekeeping rotations, the Regular Force rotated regimental battalions on a six-month basis. Manpower shortages however forced the Regular Force to unwittingly resurrect the territorial concept as they began relying on ever increasing numbers of Militia volunteers to fill line positions.

Though the 1994 White Paper on Defence supported "combat capable" armed forces, it failed to provide adequate funds or resources to fully meet this mandate. Successive natural disasters in 1996 (Saguenay), 1997 (Red River), and 1998 (Ice Storm) placed the Regular Force in an unusual predicament: fighting a "war" on two fronts.

The lessons of the late 1990s and the shift in the global paradigm, post 9/11, spurred the CF to re-examine its role and how it is shaped, both regular and reserve, to meet Canada's foreign and domestic policy needs. The release in May 2005 of

Canada's International Policy Statement, *A Role of Pride and Influence in the World*, while not replacing the 1994 White Paper on Defence, was the first critical step in this process and revealed the government's new vision for the CF and the Militia's role within it. Under the banner of Transformation, the CF embarked on a reorganization the likes of which have not been seen since Unification in the late 1960s.

Foreign deployments however continue to set the pace for the military. Though nothing has been written, the direction from LFC and the CDS is that "everyone" will do at least one overseas tour. For the past 15 years augmentation has been the watchword for the Militia. All of its training has been focused on preparing soldiers for foreign deployment. This, then, raises the question of what to do in times of crisis at home.

At issue is the fact that there remains much confusion about who does what when a disaster occurs. The 2005 Policy Statement made an attempt at clarifying matters by defining the role for regulars and reserves as follows:

♦ **The Army purpose**. "Made up of Regular and Reserve (Militia) components, the Army's primary purpose is to defend the nation and, when called upon, to fight and win in war."

♦ **The Role of the Army Reserve**. "Within the Army, the Reserves (Militia) provide the framework for mobilization, the Army's connection with Canadians, and augmentation within the Canadian Forces."

The Land Force Restructure Review (LFRR) reinforced the fact that the current Militia structure was adequate to meet the needs of these roles. However, not detailed in the Policy Statement is the implicit requirement for a "local response" to an emergency. The military attempted to address this issue when it announced that under the new Canadian Special Operations Regiment (CSOR) it would create "four new Rapid Reaction Battalions … strategically [located] in Comox, Trenton, Bagotville and Goose Bay to provide a Regular Force presence and to help ensure an effective response to natural disasters and terrorist attacks."[9]

The Canadian Joint Incident Response Unit (CJIRU) "is one of four special operations forces (SOF) units within Canadian Special Operations Forces Command (CANSOFCOM). CJIRU is able to conduct a wide range of operations including support to federal departments and international operations for management of nuclear, biological and chemical (NBC) emergencies. In addition, it maintains an initial response component on a very high readiness posture as part of the national chemical, biological, radiological and nuclear response (NBCRT) which can be deployed by road or air.[10]

Furthermore, to "better respond to domestic emergencies, the Land Force will also create a territorial response capability in centers such as Vancouver, Calgary, Regina, Winnipeg, Niagara-Windsor, Toronto, Ottawa, Montreal, Quebec City, Saint John, Halifax and St John's. In addition, the Land Force, in conjunction with Canada COM, will identify other key capabilities in each region that could be used in a domestic emergency The territorial response capability that will eventually be formed will include full-time and part-time personnel in each location. To achieve this capability in an efficient and effective manner, the Land Force will review the current Reserve unit structure in each named location with a view to grouping and/or amalgamating units, as necessary. Where circumstances allow, the territorial battalions may also be supported by other Reserve components, as directed by Canada COM."[11]

It is not surprising that the military would look to the Militia to create the new "territorial response units." The Policy Statement's new and expanded vision for the reserves included a "homeland security"[12] component where the Militia would act in

"supporting civilian authorities by responding to domestic emergencies focusing on their expertise in chemical, biological, radiological and nuclear response, information operations and civil-military co-operation (CIMIC)".[13] Despite Militia misgivings, the idea of a homeland security force is a role for which it is ideally suited, since today's Militia can be defined as (and is) a well structured, pre-positioned force, with a clear chain of command capable of responding in times of crisis or natural disaster to Canada's needs.

A quick examination of the Militia units in the cities of Vancouver, Calgary, Regina, Winnipeg, Niagara-Windsor, Toronto, Ottawa, Montreal, Quebec City, Saint John, Halifax and St John's reveals that there are 115 regiments—almost the entire Militia complement—spread between them. Re-rolling or amalgamating some of them makes sense. Thus "grouping and/or amalgamating" units to provide a crisis response is a logical response to the need; but, there are serious concerns.

First and foremost, the issue of re-rolling regiments as "first responders" is fraught with danger. Having suffered through two attempts to restructure the Militia, battle lines between the Militia hierarchy and the Regular Force have regularly surfaced with defensive positions well established. Too often, any attempt to re-role a unit without extensive buy-in from the unit itself and the Primary Reserve leadership in general has been met with fierce resistance. Over the last century this powerful political resistance has waned somewhat, but has been bolstered in recent years by a lobby group called Reserves 2000. Though their combined ability to influence Militia matters remains less than it historically was, they nevertheless remain a group to be reckoned with.

Next, implicit in any Militia reorganization is the need for an adjustment to the funding and manning ceiling of regiments that remain in the cities chosen. This is critical since presently many regiments are, and always have been, critically undermanned, largely due to funding restraints. Re-rolling a regiment will mean that the remaining regiments in the chosen city or region will have to take up the slack lest there be a capability ripple effect throughout the military. Further, the re-rolling of a Militia unit to include "full and part-time personnel" assumes that people are available.[14] The reality is, however, that at present everyone who is available for active service is already serving. Any attempt to pull people, particularly junior and senior leaders, from national positions to fill new regional positions would only exacerbate an existing manning crisis.

Finally, it should also be noted that the level of training required to support an adequate response to a nuclear, chemical or biological incident far exceeds the level of training anyone in the Primary Reserves can bring to the table. It must be realized that specialized training will be required, supported by regular interactions with community first response groups, if the concept is to work.

Yes, It Can Work

Despite these concerns, can a territorial battalion actually work? History has shown that indeed it can, and that the Militia has a vital role to play. However, in an article published in the Ottawa Sun,[15] military historian Jack Granatstein is cited as the co-author of a report that asks the questions "what plans [exist] if B.C. has a major Earthquake? What plans [are there] if a Tsunami hits the East Coast?" Granatstein concludes that there is no communication between Army, Navy or Air Force reserves when it comes to crisis planning. Echoing the 1950s National Survival role, the report goes on to state that "in the event of a terrorist attack on Toronto, Montreal or Vancouver, the presence of 1,000 or 2,000 trained reservists [would] certainly be invaluable to the civil authority in preserving public order and in tasks of rescue, containment and cleanup."

It is important to note that the National Defence Act[16] outlines circumstances under which the CF may be mobilized.[17] This can only take place if the CF is capable of

providing “unique skills” that are no longer resident within the communities affected. The exception here is that as a manager of “federal assets” the commanding officer of a militia unit may order the mobilization of his regiment to protect the “life and limb” of Canadian citizens. But even then, terms and conditions are very strictly controlled to limit the time the military will spend on the ground. A territorial battalion may be the answer.

The High Readiness Concept

For a territorial battalion to work it would have to be built around an existing structure similar to that of an infantry regiment. Re-rolling one regiment in each of the designated cities would provide that structure. However, structure is useless without personnel to lead. To this end, the designated regiment would need to be supported by high readiness personnel from other regiments in the region. Again, the brigade exercise model is a good example wherein a single regiment is tasked with key leadership positions supported by personnel from other regiments. Basing the territorial battalion on the regimental model would provide the necessary leadership, especially if positions were created that could be filled by personnel (regular and reserve) being “posted in” for a limited time.

In principle, each regiment in Canada would maintain high readiness section(s) on a rotating basis. The high readiness section would consist of troops identified as willing and prepared for immediate domestic deployment. To achieve this, the following would be necessary:

- Each member would complete the DAG[18] process to level three within the first two months of the training year. This would include MLOC[19] training and medical screening. All paperwork would be completed and available on file.

- All kit required for a 48-hour deployment would be kept in the armouries.

- Each member would be on 2 hours notice to assemble at a pre-designated location once called.

- The section would be required to parade one extra training evening per month to receive mission-specific training.

The primary advantage of the high-readiness section concept would be to provide an immediate footprint and military capability on the ground in the event of a local or brigade level emergency. By pooling resources, the brigade commander would be able to quickly build a battalion from all units in the brigade area or, in other words, a territorial battalion. For this system to work effectively, the regiment designated as the backbone for the territorial battalion would need to have training exercises incorporated into the brigade training syllabus, and be supported at the brigade level. This means personnel and money.

Implicit in the formation of these territorial battalions however, is the need for all members to be volunteers. This will present a problem particularly in leadership positions since these tend to be older personnel with full-time jobs and commitments. Given Statistics Canada’s finding that 75% of Canadian workers are employed by firms with fewer than 50 employees, one quickly realizes that there would be substantial resistance to the government having the ability to take people away from jobs that are key to a small firm’s livelihood. Since job protection legislation is a Provincial matter, not a Federal one, getting all the provinces to pass the same—or similar—job protection legislation is highly unlikely, though admittedly some progress has recently been made.[20]

However, job protection may not be as big an issue as described, since—as in the case of the 1998 Ice Storm—the area being affected would be "closed for business" anyway; short-term callouts may be effected without major impact to the small employer.

Limited Callout

Since the most likely scenario would be for the Militia to provide a disciplined body of troops to help with cleanup and provide security in the event of natural disaster, an adjustment to Provincial emergency measures legislation is suggested. To allow short-term (under 30 days) callouts, job protection is recommended for Militia personnel who volunteer for such service. If viewed as support for existing emergency measures legislation, any job protection proposed would stand a higher likelihood of passing since business in the affected areas would already be shut down for the duration.

The greatest advantage here is that those who would normally not volunteer for such service (senior NCOs and officers in civilian careers and employment), would be more willing to volunteer, providing the necessary backbone of leadership required to run a successful operation. Playing to the reserve's traditional strengths, the inherent local knowledge and network the Militia soldier brings to the operation would ensure a greater degree of success than if the Regular Force were dispatched to the area. In any event, Regular Force platoons could be dispatched to given communities to round out the numbers, provide technical assistance, and be TACON[21] to the local Militia commander, who would, in concert with local authorities, run the operation. In the event of a natural disaster the military would take a back seat and act only when called upon to do so. However, in the event of a terrorist event, the military would come to the fore to provide the "unique capability" of hard point security, patrols, observation posts and aid of the civil power that only the military can provide.

This shift in emphasis from the Regular Force to the local Militia commander dovetails with recently passed Ontario legislation for the creation of emergency measures councils within each Ontario community.[22] To further enhance the capability of these councils and integrate military capability, each council would have a military representative from the local regiment. Within Land Force Central Area (LFCA) this directive has already been passed to each regiment for action and has been well received by the communities. Similar plans in Land Force Western Area (LFWA), however, have met with some resistance.[23]

Inherent in this approach is the need for each regiment to begin conducting annual Assistance to Civil Authorities exercises in coordination with local authorities to ensure civil/military interoperability. An example of this approach can be found in the United States where Exercise Red Dragon is held yearly. This exercise groups American National Guard and Reserve units with civil authorities in simulated natural disasters and terrorist events.[24] Such an exercise in Canada would allow communities to see military capabilities and strengthen bonds between military and civilian authorities. The inhibiters of all of this are, of course the age-old demons of money, personnel and political will.

Conclusion

There are three realities that must be addressed when considering reorganizing the Army's Primary Reserve to create territorial battalions. First there is the reality of what currently exists. By that we mean the Primary Reserve structure, the Regular Force structure, and the roles they each currently have. Next is how the two systems support each other through augmentation, recruiting and direct transfers. And finally there is the

grey area of what needs to happen to help the military meet the demands placed upon it. This last point is more often talked about and less often written about.

"Money is never an issue"[25] when there is clear vision and an achievable goal. That said, everything costs money, and it is time people owned up to it. Unless new money is injected into the system any attempt at reorganization would only continue the current practice of shuffling the players around the chessboard with little gain other than increased animosity.

Political will, however, remains an elusive animal. Tampering with decades of military tradition can be a fast track to political obscurity for any politician bent on tampering with the existing structure. Conversely, military leaders attempting to rally political support for a particular cause can very quickly find themselves in areas fraught with unforeseen dangers.

This leaves the issue of personnel. The military is already having problems meeting its current recruiting needs to keep up with attrition and operational demands. It is unrealistic to embark on the creation of new—and separate—battalions over and above the existing structure. It is however, reasonable to re-roll an existing unit to meet the emergency requirements of the community. The creation of territorial battalions based on volunteers from surrounding regiments makes sense, since the impact on the existing manpower strain would be minimal. More importantly, a long history of brigade level exercises has proven that the regimental model works.

But re-rolling must be approached with caution, as the guardians of tradition stand ready to rebuff any attempt to tamper with carefully crafted and long cultivated Militia image and traditions. While everyone is keen to reorganize the Militia to meet the needs of the Regular Force, few are willing to do the reverse. LFRR clearly stated that the current structure of the Militia is well suited to support the needs of the Regular Force, and by extension the needs of Canada; but that assessment was made prior to the introduction of this territorial battalion concept. Even so, this paper has shown that the existing structure can support the creation of territorial battalions without major impact.

Perhaps Major-General Vokes was right. Perhaps a more flexible structure is required, in which case the regimental system—both regular and reserve—that has sustained Canada down through her history needs to be rethought. Many have argued that turning the infantry into one unit, similar to the Navy or Air Force model, is the best approach. But that's the subject for another paper.

About the Author..

Sgt Kurt Grant is a serving member of the Brockville Rifles and a regular contributor to The Canadian Army Journal on Militia matters. He is the author of All Tigers No Donkeys: A Canadian Soldier in Croatia, 1994-1995, and is currently enrolled at the Royal Military College in the BMASc program.

Endnotes

1. Vokes to Simons, September 1952, DHist 73/606
2. CANFORGEN 050/08 SOFCOM 005, 28 Feb 2008
3. Such as the 1996 Saguenay Floods, the 1997 Red River Floods, and the 1998 Ice Storm in Eastern Ontario and Western Quebec.
4. The Panda Brigade was initially formed from volunteers from the Militia, and Korean and Second World War veterans. However, they were eventually converted to regular full-time positions.
5. The Kennedy Commission had looked to the Militia to produce a nucleus of partially trained and equipped units of all arms and services that could be mobilized reasonably quickly for service at home or abroad.
6. Brigadier Anderson's 1957 study was a frank assessment of the Militia's capabilities. No unit would be ready to fight 30 days after the start of any conflict, he reported, and many would take several months to recruit to their authorized

establishment. Anderson therefore recommended that the reserve be divided into two elements, by function: the best Militia units would be transferred to a regular army reserve, carrying the names of Regular Force regiments and utilized to round-out the 1st Canadian Division establishment. Many of the rest would become numbered battalions of provincial regiments with the job of contributing a partly trained nucleus for home and civil defence. The worst and weakest would be struck off strength immediately. (Anderson report, April 1957, DHist 112.1 (D160)).

7. Joel Sokolsky, *Canada, Getting it Right This Time: the 1994 Defence White Paper*, posted at http://www.dtic.mil/doctrine/jel/research_pubs/canada.pdf, accessed 13 Mar 2008.

8. Government of Canada, 1994 Auditor General's Report, chapter 26.

9. Government of Canada, *Transform and Modernize the CF*, posted at http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/ddm/rpp/rpp06-07/sec1h_e.asp#2, accessed 12 March 2008.

10. CANFORGEN 050/08 SOFCOM 005, 28 Feb 2008

11. Government of Canada, *Transform and Modernize the CF*, posted at http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/ddm/rpp/rpp06-07/sec1h_e.asp#2, accessed 12 March 2008,

12. The term "homeland security" is not actually used anywhere in the Policy Statement. The term in this context however, made popular following 9/11, refers to national security and the role the military plays.

13. Government of Canada, *Canada's International Policy Statement, A Role of Pride and Influence in the World, Defence—Summary*, 5.

14. An example of how many reservists are currently employed can be demonstrated by the following truism. If all the reservists in the National Capital Region (NCR) were to stay home one day, work at NDHQ would stop.

15. Judy Monchuk, A Crisis in Planning—Canada Not Prepared to Handle War or Natural Disaster ; Report, *Ottawa Sun*, 29 Sep 2005.

16. *The National Defence Act*, Part VI, para 274—283.

17. **Editorial Note**. More detail regarding aid to civil authority, e.g. disaster relief, as distinguished from aid of the civil power, can be found in the *Canada Command Direction for Domestic Operations*, available on the Canada Com website at http://canadacom.mil.ca/en/ccddo_toc_e.asp

18. DAG: Departure Administrative Group.

19. MLOC: Minimum Level of Capability.

20. At present six provinces have enacted job protection legislation. The federal government also has ensured that positions within the civil service and federal agencies are protected.

21. TACON (tactical control) refers to command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed direction and control of movements or manoeuvres within the operational area necessary to accomplish missions or tasks assigned. Tactical control may be delegated to, and exercised at any level at or below the level of combatant command. Tactical control provides sufficient authority for controlling and directing the application of force or tactical use of combat support assets within the assigned mission or task.

22. *Emergency Management and Civil Protection Act*, R.S.O. 1990, Chapter E.9, section 3.(1).

23. Comment made by the LFWA Commander at the Army Reserve Evaluation working group on 17-18 Sept 2005.

24. Briefing provided to the Army Reserve Evaluation working group on 17-18 Sept 2005, by Maj Zeidler, Canadian liaison officer to the United States National Guard.

25. MGen Fitch, in conversation with the author, Aug 2005.

EFFECTS-BASED OPERATIONS—AN AIR FORCE GEM BECOMES A DULL ARMY ROCK

Mr. Vincent J. Curtis

A profession is a conspiracy against the laity

George Bernard Shaw

The theory of effects-based operations (EBO) follows a trend in western intellectualism that began in the 17th century with the introduction of philosophical system building. Philosophical system building, which reached its climax in the 19th century, was founded upon the belief that the mode of exposition of science is the most respectable way in which any body of knowledge can to be presented, and therefore knowledge ought to be so presented if the *body* of knowledge is to be considered respectable.

Sir Isaac Newton wrote the premier example of scientific exposition in his work on mechanics called *Principles of Natural Philosophy*. He described his method as: "I lay down the law, and from that I derive the phenomenon." The laying down of principles and from them deriving the logical consequences henceforward became the established procedure for the exposition of any kind of body of knowledge. Scientific exposition was the sign of intellectual respectability. When that method was applied to the subject of ethics, the name of the school of thought thereby created terminated with the suffix "-ism."

The trouble with this mode of thinking and these expectations is that only the branches of the hard sciences and of mathematics are properly susceptible to the scientific method. These are the only areas that can be held to that standard of reliability, and they need to be if they are sciences as they purport to be. When ethics is propounded in scientific fashion, as it was in the 18th and 19th centuries, the "laws" of human conduct amounted to dogmatism, as though human judgment is susceptible to universal laws, derived from some principle arbitrarily held to be the highest. 'Ought' was substituted for 'is'.

The theory of effects-based operations is like ethics insofar as the theory lays down a set of prescriptive 'oughts' based upon a small number of dogmatically asserted propositions, and is propounded in a systematic way. EBO theory is a product of over-intellectualization, of presenting the obvious and the trivial as profound insights and discoveries. By calling it "effects-based", the authors of the theory lay claim to the strength of covariance that is expected of a science.

The problem with the dogmatic laying down of laws or principles and from them expounding a body of knowledge that is not susceptible to scientific method is that systemic errors inevitably arise. The principle arbitrarily held to be the highest isn't always so. Military theories expounded in scientific method suffer from these weaknesses of systemic error on the few occasions when they are properly propounded at all.

A school of thought that is particularly relevant to EBO is logical positivism. This school of thought is the natural home of engineers. The underlying principle of logical positivism holds that anything that exists is measurable, and if something isn't measurable, it doesn't exist in reality.[1]

This philosophy is useful in the workaday world of engineers, who must build bridges, design computers, refine oil and so on. The measurement of variables is essential to their work, and if they can not measure it or calculate it, the concept is of little use to them in their work.

However love, desire, hatred, justice, determination, jealousy, personal impressions and their intensities are not susceptible to objective measurement. Yet most of us would say that they exist, and that many of them vary in intensity from time to time and from person to person. Subjectively, we observe that one person is more determined than another, that the same person can be more determined at one time and less so another time, more determined to achieve a particular end and less determined another, and so on. None of these kinds of observations is susceptible to objective measurement.

The psychological sense of defeat, for example, is a feeling that is not susceptible to objective measurement. It has often been said of battles that both sides felt they were losing, and both were right. Suddenly, the will of one side collapses, and the side with the stronger will, or means, or both, wins the battle. Not even the often misused opinion poll is theoretically capable of measuring these rapid fluctuations in outlook and of predicting the point of collapse.

A very basic flaw of EBO theory is that it requires its practitioners to know the inherently unknowable and immeasurable: the strength of human will and the limit of human ingenuity. Another flaw is that it implicitly disregards the operation of chance in war. The theory of EBO is the product of a mind-set that requires that any endeavour of human thought be propounded as a science or it simply isn't respectable as a body of knowledge. What will be shown here is twofold: first that the theory of EBO is not properly propounded as a theory in the first place, and its presentation is rife with errors. Second, the useful practice that appears to derive from EBO theory is nothing but the workings which military common sense would have achieved if applied from the beginning. EBO theory is an over-intellectualization of the trivial and obvious. Even if propounded free of elementary mistakes, EBO theory improves nothing of the body of military common sense. EBO theory is a rock the mental rucksack doesn't need to carry.

EBO Theory

The definition of effects-based operations is, according to the US Joint Forces Command: *a process for obtaining a desired strategic outcome or effect on the enemy through the synergistic and cumulative application of the full range of military and non-military capabilities at all levels of conflict*.[2]

This definition fails at many levels. In the first place, it is not grammatically correct for it mixes plural with the singular. Second, it says that a military operation is a process, when it is an activity. And if one accepts for the sake of argument that a set of military operations collectively amount to a process, then the definition says that "effects-based" means "for obtaining a desired strategic outcome or effect on the enemy through the synergistic and cumulative application of the full range of military and non-military capabilities at all levels of conflict." To accept such a meaning for the expression "effects-based" requires one to live in a mad-hatter world where words mean what we want them to mean, whenever we want.

One might dismiss all these objections as trivial philosophical points, but there is another objection not so easy to dismiss at the heart of the definition. The "obtaining of a desired strategic outcome or effect through the application of the full range of military and non-military capabilities" is practically unlimited in scope, and the words delimit nothing. The description is trivial and meaningless. The full range of military and non-military capabilities of a nation is about equal to the full range of national power, and of

course a nation will apply some level of national power, such as diplomacy, to obtain a strategic outcome it desires. One cannot tell what an EBO is not.

We shall see later that effects-based operations, either individually or considered as a particular set of operations, are not a process; the set of EB operations are the product of a process. EBO theory offers an approach to problem solving; but why the EBO approach is superior to, and distinct from, other approaches that can be conceived is not obvious from the definition. Finally, the EBO approach is only applicable when the fundamental propositions on which it is based hold good.

The Properties

The following properties are said to characterize EBO:

- Focus on decision superiority;
- Applicability to war and peace (full spectrum operations);
- Focus beyond direct, immediate first-order effects;
- Understanding of the adversary's systems;
- Ability of disciplined adaptation;
- Application of the elements of national power; and
- Ability of decision-making to adapt rules and assumptions to reality.

In addition, EBO theory claims as its core the determining and calculating of the combatants' philosophical (not physical) centres of gravity.[3]

The purpose of rendering a property is to make the subject clearer. The property predicated of a subject ought to be as least as familiar to us as the subject itself. A good property is one that clearly distinguishes the subject from other subjects, and is true of the subject all the time. The properties of EBO listed above are not properly rendered.

We do not know what is meant by decision superiority or by full spectrum operations, what systems are, or what disciplined adaptation means. If we knew what decision superiority really meant, the focusing on it as a property of the theory ought to help separate EBO theory from other theories of fighting. But since most military theories are concerned with how one obtains a favourable decision, and these seem to involve the gaining of superiority at some point, the focusing on decision superiority says unintentionally that EBO theorists believe that competitive theories do not aim at gaining victory.

Let us dismiss these as mere philosophical objections, and attack the heart of the theory. Properties 2 and 6 are trivial restatements of the definition. To obtain a desired strategic outcome, of course a nation will apply some level of national power, such as diplomacy. It says in the definition that EBO applies to war and peace and involves the application of national power. The addition of full spectrum operations to property 2 is improper and, if anywhere, should be added to property 6 "Application of the elements of national power" since FSO comprise the application of several of the array of national powers. What the expression full spectrum operations means is unstated. (N.B. The Canadian meaning of FSO is different from the American.)

Like the properties of manoeuvre warfare, the properties of EBO have more than one focus; in the case of EBO the first might be simplified as a focus on winning (1), and the second which might be simplified as keeping an eye out for unintended

consequences (3). When used metaphorically as it is here, the term focus is a singular: the focus is what one is most concerned about. But there can only be one "most important." There cannot be two 'most important', and so there cannot be two foci here, metaphorically speaking. The focus, in other words, should be on winning, and one ought to avoid doing things that make winning more difficult. Properties 5 and 7 are vague and accidental, they do not apply to EBO but to the persons employing it. These alleged properties of EBO are improperly rendered and are of no assistance in understanding meaning of EBO.

The Centre of Gravity

The expression and concept of 'centre of gravity' was introduced into military theory by Clausewitz, who used it as an analogy. The analogy was with the concept of a centroid in the field of mechanics. In mechanics, a body moves as if its mass were concentrated at the centroid, or centre of gravity. Clausewitz used the analogy that if one overthrew the centre of gravity of the enemy, it would be as if the entire body of the enemy was overthrown. If Paris were captured, all France would fall, for example, Paris being the centre of French gravity. When the Army of Northern Virginia under Robert E. Lee surrendered at Appomattox, all Confederate resistance collapsed, the army of Lee being the centre of Confederate gravity.

In military theory, a centre of gravity is a concept of analogy. Because cities and armies are physical things, it is possible for the enemy's centre of gravity to be a physical thing. But what a 'philosophical' centre of gravity might be is anyone's guess. EBO theory says it is possible to find a combatant's philosophical centre of gravity. This cannot be so. Because one cannot understand what a 'philosophical' centre of gravity is, it is pointless to search for it if it even exists, for one cannot know that one has found it if one does know what it looks like. The authors of EBO theory might have something specific in mind; but since a 'philosophical' centre of gravity is not conceivable, whatever that specific thing they had in mind was, it is not a philosophical centre of gravity because what they had in mind was inconceivable. The EBO theory of 'centre of gravity' does not follow conventional usage, and so we are back to the mad-hatter world.

Leverage and Economy

The proponents of EBO claim that the benefit of this method of approach lies in economy of means. If one is clever about choosing the target list, and clever about the means of dealing with the targets, then one can achieve the aim with a minimum of destruction and with greater speed. Economy of destructive effort is the highest principle in the EBO theory. 'Economy is best' is the dogmatic assertion underlying EBO theory.

The assertion that 'economy is best' is not the same as 'economy is good.' 'Economy is good' is always true, but the assertion that 'economy is best' is not. When economy is not best, EBO lead to failure because the theory is being applied outside of its range.

If one knows exactly which targets to choose and exactly how to deal with them, then one's destructive assets are able to be leveraged to the maximum. But the farther away one gets from this level of perfection, the less effective EBO are in achieving the aim and, to achieve the aim, the more EBO must degenerate into destruction based operations and, in consequence of that, the less leveraged the destructive assets are.

Containment, Leverage, Risk and Effects

A simple illustration will show how containment, leverage and effects are interrelated in EBO theory. In EBO theory, a tank is a tank-system. Prior to EBO, the Air Force

criteria for the tank-system being classed as destroyed was that the tank-system had been blown into a minimum of 50 unrecognizable pieces spread over at least an acre of ground. Now, infantry and tankers know that if a small hole is punched in the side of the tank and hot gases are injected, the tank stops working. EBO theory calls this way of dealing with the tank-system "control," and the rendering of the tank-system non-functional through "control" as "achieving a specific effect."

If "control" is as good as "destroyed," then "control" has the same effect of "destroyed." (In philosophy, the difference between the two is that the acre-sized tank-system has "non-functioning" as a permanent property, while the brewed-up tank has "non-functioning" as a temporary or accidental property.) Hence, effects-based operations are those in which systems are controlled instead of destroyed through the destruction or disruption of some critical component of the system only, leaving the rest of the system intact. Crippling an entire system by the destruction of a small but vital component is called achieving a specific effect.

If control is accepted as sufficient for the purposes at hand, and you have at your disposal invisible aircraft and precision guided munitions, you can achieve a lot more with less. Hence, by accepting controlled as being as effective as destroyed for the purposes at hand, one's destructive assets are said to be leveraged because one doesn't need as much destructive power to achieve the status of controlled as compared with the status of destroyed.

In practice, EBO require the judicious selection of targets whose destruction will control systems, control having the effect of destruction of the entire system. The entire working burden of EBO is carried in the expression "the judicious selection of targets."

The fact that "control" could be as good as "destroyed" for some purposes came as a blinding revelation to the Deep Thinkers at Big Blue, which says something about the intellectual prison they had built for themselves. An error in EBO advocacy is rooted in the proposition that the theory is applicable for all purposes.

Historically, the genesis of EBO thinking was the first Gulf War. In that war, the US Air Force (USAF) applied what it called a "parallel attack" to knock-out simultaneously the central nodes of the Iraqi air defences, and then rapidly followed up with air strikes against other denuded and suddenly vulnerable targets. The risk that was assumed by the USAF was that the first wave of parallel attacks would all succeed. If they did not, the immediate follow-on wave of strike packages would themselves be vulnerable to the still-effective Iraqi air defences. Because "control" was deemed as being as good as "destroyed," and stealth aircraft equipped with precision guided munitions were used, an unprecedented number of targets could be and were attacked at the opening of the air campaign of Desert Storm, and this is where the expression "parallel attack" comes from. There was no progression from one target class to another; everything was attacked at once.

Out of this experience came the generalized theory of "parallel attack" and the associated ideas of containment and rapid dominance. With the application of intellectual Viagra, EBO expanded into a full-blown theory of a single process by which a nation and a platoon commander can each achieve their goals.

What the US Air Force relied upon in 1991 was that attacking and disrupting command and control systems can cause a temporary breakdown in the coordination of the enemy forces, and that there is great advantage to be gained by the "simultaneous entering into action of the numerous fractions whose efforts must combine to make an attack successful."[4] An adversary has trouble coping with multiple crises that arise abruptly and simultaneously, especially when command and control is disrupted. When

the enemy force cannot operate as a single, coordinated whole, the efforts of the individual parts that do function are spasmodic and less than formidable.

The Deep Thinkers opened their explanation of this discovery by positing that any political entity can be thought of as a system of systems. The second attacking wave featured a whole new brigade of engineering terminology: "achieving certain desired political effects," "parallel war," "roll back," "series warfare-sequential attack," "rapid decision operations," "achieving specific effects," "aggregate destruction to achieve military objectives," "core systems," "controlling vital functions," "stealth/precision combination," "favorable conflict termination," "traditional destruction-based methodology," "CONOPS," "military and political objectives of the Coalition," "effectively influence an adversary," and "desired effect per unit of lift." Having escaped from one intellectual prison, they built themselves another.

The observation about control being as good as destruction can be accidentally true. The statement most nearly holds good when victory is rapid; but as time goes on and victory is delayed, maintaining control becomes more problematic and the risks of loss of control arise. Hence the emphasis in EBO on "achieving rapid dominance." Clausewitz referred to the possession of foreign territory as a kind of rent or a borrowing—something never permanent so long as the enemy maintains a force in being.

The grand strategic contradiction here is decisiveness. Rapid victory can sometimes be achieved by cleverly overthrowing the enemy; but what makes victory really decisive is the infliction of heavy casualties upon the enemy, especially in numbers killed. Heavy casualties, lots of suffering, and little hope of reversing the situation later on are what induce the defeated to accept the outcome of the battle and the war as decisive.

The operational weaknesses of EBO arise when victory is not quick. This dilemma was faced by the Germans in Barbarossa. To have driven on to Moscow in a single thrust would have left hundreds of partly organized Russian formations and millions of Russian soldiers on the German lines of communication. If the Soviet Union collapsed upon the capture of Moscow, the risk presented by the "controlled" Russian forces left behind was eliminated; but if the advance bogged down and the left-behind Russians managed to achieve a measure of coordination, then the risk to the lines of communication and the danger to the advancing spearheads would rapidly become acute. In the end, the Germans resorted to a series of shorter enveloping advances, followed by the destruction of the ensuing cauldrons. Ultimately, the German advance culminated short of Moscow for lack of time and too many losses; but the German Army was saved from a Napoleonic catastrophe in the winter of 1941-42 by having lines of communication open. Farther back in history, the Mongols annihilated entire populations and laid waste to the land as they advanced westward, because they lacked the numbers to control the vast territories they conquered. Schlieffen advocated annihilation because it made control in the ensuing peace easier to achieve and to maintain.[5]

In sum, while control as opposed to destruction may be more humane, the argument that control is as good as destruction is contentious and limited, and is not strongly supported by historical evidence. It sounds good and seems to work when victory is quick. But quick victories tend not to be decisive, and before long the enemy is contending again. In long conflicts, control often becomes a false economy.

Ends and Means, Cause and Effect

EBO are a kind of attack, and what distinguishes an EBO attack from all other kinds of attack is the form of it—parallelness—and the purpose for which it is undertaken

(called the 'final cause' in philosophy): disruption. The objective of EBO is a sudden comprehensive disruption of the enemy. Specific effects are demonstrations of one's power, and the enemy is to be intimidated into surrender.

The end of a particular operation is the destruction of a particular thing, which destruction is the proximate cause or the means of the disruption of a larger thing, the desired effect. Collectively and conducted in parallel, these operations lead to the thoroughgoing disruption of the enemy. Convinced of the overwhelming superiority of the attacker, the disrupted surrender. This is the chain of reasoning behind EBO, and this chain shows where the assumptions behind EBO can fail. The greatest weakness in the chain is the confusion of cause and effect.

What the commander controls are causes, not effects. If he selects the right target to destroy, and causes its destruction, that destruction is itself only a proximate cause, the cause of the disruption of a system. Likewise, the disruption of the numerous systems is posited only as the proximate cause of the enemy's surrender. EBO should be more properly called "system disruption operations" because that is what they are and what they directly aim at. The expression "effects-based" suggests a degree of control that is unwarranted, but it sure sounds impressive since it invokes the certainty of a science.

EBO in Practice

The Wikipedia entry provides the following description of EBO in Afghanistan:

> The aim of EBO in Afghanistan is to "help shape an environment that enables the reconstruction of the country as a whole." US policy objectives are to create a "government of Afghanistan committed to and capable of preventing the re-emergence of terrorism on Afghan soil." Since all efforts are undertaken with that end-state goal in mind, the US military maintains a Joint Effects Coordination Board which serves to select and synchronize targets and determine the effects desired. The Joint Effects Working Group targeting team make recommendations to the JECB on three priorities: enable Afghan institutions, assist in removing the cause's instability, and deny the enemy sanctuary and counter-terrorism.
>
> The product is a three week planning window, called a battle rhythm, to produce the desired effects of the commanders as set out in Operations Orders, with weekly fragmentary orders (FRAGOs) updates. Activities include both lethal and non-lethal missions, including civil-military, public affairs, reconstruction, intelligence and psychological operations, and conventional combat and fire support missions.
>
> An FA lieutenant, as an "Effects Support Team" leader must understand how to employ lethal and non-lethal assets to realize the maneuver company commander's vision of future operations. He must be able to work with civil affairs teams, special operations, coalition and host-nation forces, as well as NGOs and OGAs.
>
> This requires a shift away from artillery fire as a solution to all problems, and a focus on integration of multiple dimensions and methods to achieve desired results.

The conflict in Afghanistan is a slow-speed, low-intensity affair. Dominance is already achieved. The contrast between this conflict and Gulf Wars I and II and Kosovo could hardly be greater. Parallel war is not taking place. The enemy does not possess and is not reliant upon the sophisticated systems of a modern civilized state. Yet EBO theory, which developed out of the experience of Gulf War I and Kosovo, is supposed to

be applicable to Afghanistan. The limits of commonality seem to be the target matrix, the committee of experts that flesh it out, and the pretence that one can cause a specific effect. This thin gruel hardly merits the intellectual fuss raised over it, and calls into question the whole business of parallelness being the essential property of EBO.

The above military-ese relates a mission followed by groupings and tasks—who is to do what to achieve the aim. Since Afghanistan is a low-intensity conflict, many of the tasks are not related to combat. The disruption of systems here seems to be a pretty abstract affair.

A commonality with practice in the Gulf Wars and Kosovo is the use of committees to develop taskings. In *The Politics*, Aristotle observed that wisdom tends to emerge when a group deliberates. These EBO committees are staffed by highly trained and experienced professionals, and it would make sense that wisdom on the conduct of a low-intensity conflict would emerge from a committee thus staffed and tasked with achieving the aim of winning the low-intensity conflict in Afghanistan with the means at their disposal.

Another point of commonality is the pretence that planners know what will disrupt the enemy, of what cause leads to the effect desired and the production of that intermediate end that is the proximate cause of the desired effect. The digging of the well makes the villagers happy with the government in Kabul and the happy villagers are now prepared to betray the Taliban force hiding in the hills. This is the style of, and the error in, EBO theory when put into practice in Afghanistan. The human heart is too complex to posit a cause-effect relationship in cases like these. What we have here is a case of trying to twist a buzz-word and a buzz-theory to fit situations for which it was not intended.

What these committees actually do is assign taskings that they hope will advance the war effort towards the attainment of the aim. These taskings are causes and means, not effects. In matters concerning the human heart, the effect of an action is not always predictable, and for that reason the cause-effect relationship we rightly expect from science does not obtain.

EBO alone has never achieved the aim in practice. In Gulf War I, the air campaign lasted for over five weeks, and a land invasion of Kuwait was still necessary to drive Iraqi forces out. The Saddam Hussein regime did not collapse. Milosovic did not yield on Kosovo until after a land invasion was threatened. The shock and awe air campaign in Gulf War II also failed to produce an Iraqi capitulation; the Saddam Hussein regime did not collapse until the Coalition army was at the gates of Baghdad. A land invasion and occupation of territory is beyond the normal conception of effects-based operations although the theory is so broad that any action can be said to produce an effect.

Conclusion

The play of chance in war has not been repealed. Consequently, any theory of warfare that posits a relationship between ends and means as strong as that of "cause-effect" falls into the error of *post hoc ergo propter hoc*. This is not to say that effects do not have causes, but effects are inherently unpredictable in matters of the human heart and where chance plays a part. In these matters, one can truly determine the cause of an effect only after the fact. A commander can control causes, but he cannot control effects.

Effects-based operations are those military actions undertaken with the aim of producing specific effects upon the recipients of the actions. The specific operation is the cause of the specific effect. These specific effects are means to further ends. The

formal cause of the military action is the content of the vision (the "end-state goal") of the mission the action is supporting. The final effect of the action is victory.

Since the emphasis is upon effects, the judgment of a person knowledgeable and experienced in relating military means to ends and acting in that capacity is necessary to develop the taskings that will produce the desired effects.

In matters of the human heart, cause-effect relationships in a predictable, scientific sense between specific actions and specific effects do not obtain; to produce a desired effect in matters of the human heart is a hit-and-miss affair. This means that even if a desired result is obtained, it cannot be ascribed with certainty to the action undertaken that was intended to cause it. That is an example of the error of *post hoc ergo propter hoc*.

What military planners actually control are causes, i.e. the means at their disposal. The stress upon effects in EBO theory is philosophically strained because achieving effects is unreliable, even in theory. In practice, EBO theory degenerates into the standard military program of attaining the aim through the sound application of the means at the commander's disposal, and learning from experience. The use of committees of experts to select and assign taskings is extremely useful, but is not unique to EBO.

The first principle of war is selection and maintenance of the aim. Once selected, the aim ought to be unchanging; meanwhile, specific strategy, tactics, and missions all can change in response to changing circumstances. EBO theory introduces a false rigidity into this construct because it posits an unchanging relationship between means and ends; ends that are themselves means to further ends, the final end in that chain being the attainment of the aim. But it is false to say that all relationships between means and ends in war are unchanging; it is the final end that is unchanging.

EBO has become another buzz-word that is used to justify actions that commanders would do ordinarily anyhow. As commanders become more experienced in fighting a particular conflict, their judgment in relating ends to means in that conflict becomes surer. Military causes at the commander's disposal tend to produce desired effects more reliably as the conflict wears on. It is as this becomes so that EBO and its theory appear to become more applicable.

EBO theory offers the commander no insight as to how to produce a particular desired effect. He is reliant upon his previous training and experience to produce a desired end from the means at his disposal. If EBO theory did offer reliable insight, a commander ought to be able to start from his desired final effect and work backwards to his starting point. If EBO truly worked, starting from the signing of a peace treaty aboard the U.S.S. Missouri, EBO ought to have worked out MacArthur's strategy for him.

EBO theory stresses the importance of attaining intermediate ends or "desired effects," but fails to say how these intermediate ends or desired effects can be strung together to obtain the final end, the ultimate desired effect: victory. EBO is neither a strategy nor a war plan. Strategy, Clausewitz said, is concerned with the use of the engagement for the purpose of the war, and EBO theory is too broad to tell the commander how to arrange his intermediate ends to produce the final end. He must rely upon his training and his growing base of knowledge and experience to form a strategy; and the EBO program flows out of his strategy. The EBO program is the product of strategy. EBO can be one component of the actualization of the commander's strategy, or all of it.

As the commander grows in experience, his judgment relating military means to ends becomes surer; and the relationship between cause and desired effect grows stronger. Nevertheless, the play of chance is an ineradicable feature of war; and the relationship between cause and desired effect can never attain the strength of covariance as one finds in science.

Just as the error of logical positivism does not arise if the philosophy is not pushed too far, so the error of EBO theory does not appear to arise if that theory is not pushed too far. Its errors tend to arise least in the hands of experienced commanders, who don't really need its philosophical insights anyhow. Logical positivism begins with fundamental statements about reality; EBO theory is merely a philosophy about a thought process, a process that degenerates into and is reliant upon common sense applied to military problems. Paradoxically, philosophy is about bringing order to, making sense of, and improving our understanding of the world; EBO theory takes military common sense and makes it complicated through the confused play of philosophical concepts. It takes the familiar and makes it unfamiliar.

EBO theory is the dressing up of the common sense of an expert. EBO relies upon the judgment of experts for deciding which effects are desirable, and how to string them together to produce the ultimate desired effect, which is the aim of the conflict.

The concept of parallel war does not play a role in EBO in Afghanistan, nor does that of rapid dominance. Since EBO is being conducted in Afghanistan, and these are not elements of it, parallel war and rapid dominance are accidental properties of EBO. Parallel war cannot be the essence of EBO because if it were essential, it ought to be true all the time. Parallel war and rapid dominance arise only in certain kinds of conflicts, and cannot be essential components of the EBO theory that is applied in Afghanistan. When the essential is found to be accidental, this raises doubt about whether a valid EBO theory really exists, or whether EBO is merely a buzz-expression whose content is filled by the person invoking it. The big problem with creating intellectual systems and applying them to warfare is that the system usually ends up as an intellectual prison.

About the Author...

Mr. Vincent Curtis is a well-travelled freelance strategist and writer who is regular contributor to the Canadian Army Journal.

Endnotes

1. Cf Maj Z. Dobbagy. *Literature Survey on Effects Based Operations: A Ph.D. study on measuring military effects and effectiveness*. TNO Physics and Electronics Laboratory, August 2003. See also Dr. Maris McCrabb. *Effects based Operations: An Overview*. Available on the Web.
2. Brig-Gen David A. Deptula. *Effects Based Operations: Change in the Nature of Warfare*. Defense and Air Power Series, Aerospace Education Series, 2001.
3. Ibid.
4. Vincent J. Curtis. "Jomini on Battlefield Tactics." in *Canadian Army Journal*, Vol 5.4.
5. Vincent J. Curtis. "Understanding Schlieffen" in *Canadian Army Journal*, Vol 6.3.

"A WAR OF MACHINES"— A RE-ASSESSMENT OF THE CANADIAN MACHINE GUN CORPS: INNOVATION OR TACTICAL EXPEDIENT?

Lieutenant-Colonel Ian M. McCulloch, CD

> Since this was ***a war of machines*** that relied for their functioning on an incessant, well-coordinated stream of ammunition and spare parts, a considerable degree of centralization was absolutely indispensable in the preparatory stage and, not unnaturally (centralization is a highly contagious disease), tended to extend itself to the actual battle also.
>
> **Martin van Creveld, Command in War.** [1]

The story of the Canadian Corps' fine performance in the Great War is also a story of how Canadian soldiers adapted and refined British command and control functions to suit their own attack doctrine, as did other colonial troops and some of the more innovative British divisions. Decentralized command, a focus on high standards of individual combat skill and the adoption of flexible tactical systems would be copied by the Canadians in part from tactical developments in the German and French armies rather than any new doctrine emanating from the British Expeditionary Force (BEF).[2]

Command as an effective process has always been susceptible to Clausewitz's "friction of war". Many external factors contribute to that friction, ranging from the technical (e.g. the lack of voice communications beyond the battalion HQ) to the sociological (e.g. the human dimension of "leadership" or, perhaps, shoddy staff work). Organizational changes and new staff measures were undertaken by Canadians in the First World War not for the sake of change but to enhance command and control systems and thus achieve more freedom of action and control on an already chaotic battlefield.

Artillery fire support, intelligence-gathering, aerial and ground reconnaissance, telephones and the development of wireless, the employment of machine-guns and tanks and the trend towards combined arms warfare are all examples of catalysts that shaped the command and control of the new modern warfare and had significant impacts on the Corps' performance. Accompanying the new design was a requirement for a shift in the application of command techniques or the process to control the new tactical systems. This shift can be termed Darwinian as emerging technologies demanded rapid evolutionary adaptation in the lethal environment in order for Canadian soldiers to survive and at the same time achieve their military mission.

While the principal functions of command did not significantly change in the Canadian Corps between 1915 and the end of the war, the command system or "arrangements" did. They had to evolve over a three-year period at every level of formation, unit, and subunit command—from headquarters' staffs down to section commanders. These arrangements evolved in tandem with the tactical, technological and organizational changes necessitated by the problems of trench warfare and, later on, the open style of manoeuvre warfare.

Some writers have pointed to the Canadian Machine Gun Corps (CMGC) as a shining example of technical innovation by Canadians during the Great War, a good

example of a "new" arm which evolved out of the trench stalemate and became an important supporting arm for the defence and limited set-piece attack. However while it is historically vogue to praise the EMMA-GEES as being innovative and far in advance of their BEF counterparts, they proved in the end to be flawed in their tactical design for offensive operations during "The Last Hundred Days."[3]

This article will briefly examine the machine-gun's tactical employment, its temporary niche as a separate "arm" and the fledgling organization that evolved around it under the watchful eye of its most vociferous advocate, Raymond Brutinel.

Lieutenant-Colonel William Antrobus Griesbach was worried.

The ex-Conservative mayor of Edmonton and former major of the 19th Alberta Dragoons was aboard the troopship Metagama conveying his new infantry command—the 49th Canadian Expeditionary Battalion (later The Loyal Edmonton Regiment)—to England. The son of a RNWMP officer, Griesbach had left law studies to serve as a CMR trooper in South Africa, and on his return home, had become a lawyer and militia officer.

The Regimental History claims "he was of the breed that has provided so many great commanders in the field—a student of military affairs who believed in throwing away the book if it transgressed the dictates of common sense. He was not the sort of man that Sam Hughes cared for, for he stood in no awe of his superiors...." He was one of the earliest critics of the Ross Rifle, being the president of a Court of inquiry in 1910 to investigate the jamming of two Ross rifles out of every batch of 50.[4]

Griesbach, a devoted student of the evolving trench warfare in France, was worried about German machine gun superiority and was writing a letter to the *Edmonton Journal* on the subject. The British establishment of machine guns, he observed, was being raised (rather belatedly in his opinion) to four guns per battalion. Since the Germans already had eight; he openly mused that the City of Edmonton might not wish her boys to go into combat having only half the firepower of the enemy.

The reaction to this letter, penned in mid-Atlantic, was immediate. The Edmonton Board of Trade notified the Minister of Militia that it was presenting four additional Colt HMGs to the 49th Bn and that a subscription list had already been opened for such a purpose. That the battalion indeed got the extra firepower is confirmed by its War Diary (WD) at the Somme, September 1916. It mentions the Battalion's extra Colts being in action long after their original official issue of four had been withdrawn in April 1916 and given to the new 7th Canadian Infantry Brigade (7th CIB).[5]

The Brigade Machine Gun Officer (BMGO) was an appointment made at the outset of war at the formation level, but for training purposes only. As the Canadian CMGC historian notes, "the machine gun sections were part and parcel of the battalions. The BMGO did not have command of the guns in action, except those in reserve or explicitly placed under his direction. He performed a valuable function, however, in co-ordinating training when the sections were out of the line."[6]

By the time 3rd Canadian Division was stood up in December 1915, the BMGO position had assumed greater importance in terms of the tactical defence. His responsibilities, besides acting as his General Officer Commanding (GOC's) principal machine gun advisor, included supervision of the tactical deployment of all brigade MGs to ensure that interlocking fires were achieved across the entire brigade frontage. He also ensured that battalions had not committed their MGs too far forward where they could be easily observed and knocked out by shellfire.[7]

The Canadian Corps received authorization on 29 October 1915 to form Brigade MG companies (BMG Coys) thus elevating the staff position into one of commanding

officer. The formation of these BMG Coys, according to their Corps History, was "the most important step to be taken in establishing of Machine Gunnery as a separate arm with tactics peculiarly its own and intermediate between those of infantry and artillery."[8]

The 7th CIB MG Coy authorized on 13 March 1916 was placed under the command of The RCR's former MGO, Capt H.T. Cock. Cock wrote of his new organization's formation on the first page of his new command's War Diary:

> The scheme of the organization was that Lewis Guns would replace the machine guns in the battalions and that the battalion MG personnel, transport and everything would be withdrawn from the battalions and form the Brigade MG Company. The Brigade MG Officer automatically commanded the MG Company.... The scheme was [later] modified....drafts from England were sent, with a nucleus of the Battalion MG sections going to the Brigade MG Company, the exact proportion being left to the Brigade.[9]

It took another month for the BMG Coy to become fully operational as the "The Fighting Seventh" went to the Ypres Salient, the battalions retaining their guns and battalion organization there until sufficient personnel had been trained on the Lewis guns and these new company weapons issued. As of 24 April 1916, the 7th CIB MG Coy War Diary recorded that all four infantry battalions had handed over four HMGs each—four Colts from the RCR, 42nd and 49th Bns, and four Vickers from the PPCLI.[10]

There is evidence that at least three of the four battalions of 7th CIB retained unofficial HMG sections within their battalion establishments despite the withdrawal of their authorized HMGs to form the BMG Coy. The 49th had received the four Colts additional to its establishment, purchased by the Edmonton Board of Trade at the CO's suggestion, and these were definitely used at the Somme. These extra 49th guns are probably what caused PPCLI Major Agar Adamson to observe somewhat enviously when his unit joined the Canadian Corps on 30 November 1917 that "some of the Regiments in the CEF have more than the laid down establishments [of machine guns] and have done good work with them." As well, he noted "the friends of [Percival] Molson offered to give us 6 machine guns" but his British CO, LCol Buller, had turned them down because the PPCLI didn't have the extra wagons, horses or ammunition allocations to support the additional weaponry.[11]

The Colt heavy machine gun (HMG), however, was not the best available on the market. It was the heaviest and least mobile automatic weapon issued to the Canadian infantry in the First World War. Not only was it difficult to keep clean in a trench environment, the Colt was, according to Canadian historian Bill Rawling, "a logistical nightmare," with "a total of 348 pieces, including tools and spare parts, as opposed to 123 for the Vickers and ninety for the Lewis."[12]

One of its earliest critics was Arthur Currie while commanding the 2nd CIB at Second Ypres. "The reports received are almost unanimous in condemning the gun," he wrote, "and I have reluctantly come to the conclusion that the weapon is, from its complicated mechanism and cumbersome mounting, unsuited for service conditions and is liable to fail at critical moments when machine gun fire is essential to save the situation."[13]

After the first blooding of the 7th CIB at Mt Sorrel, the PPCLI somehow obtained four Colt guns and created a Battalion section consisting of "5 NCOs and 20 men," for this section was "attached for duty" in October 1916 with the BMG Coy on the Somme, six months after their Vickers were turned in. It is not recorded whether The RCR turned in their two Maxim guns when they received their four Colt Guns in Bermuda, and therefore it is quite possible they retained them and took them to the UK and, subsequently, to France. Only the 42nd Bn appears to have abided by the establishment laid down.

The Colt's replacement in the Canadian battalions by the Lewis gun was definitely not mourned by Canadians. This was in a direct contrast to the unhappiness in British battalions over the Vicker's replacement by the Lewis. Historian Paddy Griffith notes that "the Lewis appears to have received a disappointingly suspicious welcome from the front line soldiers, since it was seen as displacing the greatly appreciated Vickers … yet failing to offer sufficient compensating advantages in weight, simplicity or reliability."[14]

The new Lewis gun was a 47-shot weapon with heavy drums that could be fired off in five to six seconds, but the drums were hard to fill compared to the Vickers single 250 round belt. The Canadians, never having had the luxury of the Vickers, immediately accepted the gun. The CO of the 49th commented after the 15 September 1916 attack on FABECK GRABEN trench: "the Lewis guns were everywhere and extremely serviceable," effused LCol Griesbach. "This gun cannot be beaten for its weight and portability."[15]

The Lewis gun represented the *immediate* firepower that infantry battalions craved. They could take it in with them on the assault and have it ready to fire at fleeing defenders or to consolidate their captured position against the inevitable counter-attack. Control of their use at the company level in the attack saw them placed on the flanks of the second wave, ostensibly to protect vulnerable flanks if supporting attackers on either flank failed to keep up.

The Colt would not linger much longer in its new organization either. The Vickers would become the standard issue gun in the Canadian BMG Coys by July 1916. This change shifted the tactical control of this HMG away from the infantry line and thus, infantry control. This occurred in very much the same manner as it had for artillery in the 19th century, which became "more centralised during the Napoleonic Wars, and again during the American Civil War, in the interests of developing its full tactical effect."[16]

Canadian use of the HMG in a light artillery role firing in the indirect mode as early as the Somme 1916 led to Canadians being perceived throughout the BEF as true innovators in machine gun tactics. Jack English writes that the Canadian machine gunners led by LCol Raymond Brutinel, (later BGen) proved "particularly innovative in massing their heavy variants in batteries and fighting them as tactical entities to support attacks as well as defences."[17]

Eight Lewis guns were initially issued to the Canadian battalions in Belgium on a scale of two per company. The PPCLI History notes that their new light machine gun (LMG) aroused the immediate interest of their enemy in the Ypres Salient in April 1916, goading "the Wurtembergers opposite into shouting across No Man's Land: "Where in hell did you get all the machine guns?" By the end of the Somme battles, the issue per battalion would be increased to 16 Lewis guns, thus permitting one LMG per platoon by the end of the year.[18]

This newfound firepower in each of the company's four platoons, coupled with the grenade, would give rise to a reorganization and re-emphasis on the platoon as the tactical fighting unit on the battlefield and would first be tested at Vimy in 1917. At Vimy, the 7th CIB MG Coy was certainly kept busy. Its WD noted: "Bombing raids are becoming the *order of the day* on this front and especially this week on the THELUS sector front. These raids are being carried out successfully and with few casualties to themselves by all the battalions in the Brigade. The MG Coy aids them where possible with direct fire and the support guns are nightly doing indirect fire on dumps and targets in the rear of the enemy's front-line trenches."[19]

HMGs were used to thicken up the box barrages of the artillery in support of raiding prior to Vimy. In addition, they were given a nightly allotment of indirect harassing fire

targets on crossroads and areas frequented by overland enemy carrying parties. Whilst sited in defensive positions in support of front line infantry, the "Emma Gees" were coordinated and registered day and night on SOS barrage lines to beef up artillery coverage. During the actual battle for Vimy, 150 HMGs were employed for barrage and supporting fire, causing the Official History to comment that this "was on a scale unprecedented in military history."[20]

It was no surprise then that "there began to creep into the machine gun language a lot of new gunnery terms," notes the CMGC historian, and "thus did Machine Gunners more definitely assume the role of light artillery."[21] This artillery mentality did not go unnoticed by the infantry.

"The brigading of [MG] sections into brigade companies and then into divisional battalions, while improving co-operation between machine-gun sections, did so at the cost of reducing co-operation with the infantry," states Samuels. "From being a valued and integral part of the battalion, the machine-gunners became just another drain of men from the battalion. The natural response was that the infantry commanders tended to use the corps as a dumping ground for their worst men." The CMGC historian concurs, stating that by 1918, his Corps was still receiving "the lame and the halt."[22]

Samuels also believes that the widening gulf between the infantry and the HMGs was exacerbated by the development of indirect fire. He suggests it may have partially resulted from the new Corps seeking to justify its independent existence by creating a separate function for itself; a behaviour "not uncommon among military organizations."[23]

The increased use of indirect fire by HMGs meant that the guns tended to be deployed to the rear, leading to a feeling of abandonment on the part of the infantry. Some frontline troops were inclined to believe that the HMGs enjoyed a pampered existence and fired off belts of ammunition simply to boil water for tea.

Certainly not everyone in the Canadian Corps shared Brutinel's enthusiasm for HMGs in the indirect fire role. An innovator in his own right, Colonel Andrew MacNaughton thought their employment as so-called "light artillery" a vast waste of scarce resources and a task infinitely better suited to howitzers.[24]

Recent scholarship has also shown that Brutinel and his short-lived Corps were not, in fact, the inventors of the indirect role for machine guns, the Japanese Army having successfully used it to assault Russian trenches in the 1904-1905 Russo-Japanese War. The first British Army subject matter expert to discuss the theory of indirect fire at great length was Major R.V.K. Applin in his 1909 publication "Machine Gun Tactics," a booklet which went through many subsequent printings as machine-guns came to dominate the battlefield, until Applin's writings were eventually subsumed almost word for word into British army doctrine by 1917. There is also photographic evidence that Brutinel met with Applin in 1916 or early 1917 on machine-gun trials in the Camiers Region.[25]

In the relatively static conditions of 1916 and 1917, the HMGs in the light artillery role did play a satisfactory role in enhancing the Corps' defensive capabilities. However, during the fluid conditions and the return to mobility in 1918, the CMGC would have much less influence on the Corps' offensive ability, having removed itself too far from the infantry to redesign itself for the tactics of open and semi-open warfare. The further the HMGs were from the infantry brigade, the more communication and coordination problems occurred.

Infantry platoons reorganized, yet again, in 1918 with the advent of a second Lewis Gun issued per platoon. This meant the four platoon sections could then be used as two separate fire-teams, each headed by a sergeant with one Lewis Gun section and a rifle

section. However, there are some indications that platoons were reorganized internally by their battalions much earlier.[26]

For example the CO of the 49th CEF Bn, LCol Palmer, wrote in his after-action report on Passchendaele that his rifle platoons' organization was "not in accordance with the New Platoon Organization [of February 1917]" as he laid "great stress upon the importance of every section being self-contained in all arms and under one leadership at all times. The benefit of this was clearly demonstrated during these operations."[27]

What is not clear is whether the 49th were using four sections per platoon, each with a Lewis Gun, or had merely already moved to the two-Lewis gun fire team concept that would be adopted in 1918. To have done this they would have unofficially salvaged, scrounged or stolen an extra LMG per platoon. The latter organization is plausible and could have easily been achieved. It is well known that CEF battalions maintained unofficial, non-establishment HMGs in 1915-16, and therefore it should come as no surprise that infantry battalions had extra LMGs, and no doubt the extra ammunition required for them to be effective as well.

While the LMG was highly desirable in infantry sections, the HMG, by contrast, representing firepower that had been taken from the infantry battalions and centralized under brigade control in 1916, was deployed further and further away from the infantry brigade in 1917. In January 1917, an additional MG Coy was added to each division to ostensibly offer a solution "to the serious problem of reliefs [for the BMG Coys]" and also to provide "a Divisional Reserve of machine-guns which was a much-desired tactical advance." This represented another critical step along the road to creating the CMGC. The new Corps, authorized one week after the victory at Vimy Ridge, would be proposing by the end of the year that the brigade companies be absorbed into divisional battalions. These consisted of two large companies that in turn would be divided into four 8-gun platoons.[28]

At the outset of 1918, the Allies were faced by a German army that could turn the bulk of its resources in men and materiel against them due to the collapse of the Russians on the Eastern Front. "In order to prepare for the coming test, and with the lessons of previous fighting fresh in my mind, it was resolved that every effort should be made to bring the Corps to the highest possible fighting efficiency" wrote LGen Currie. "This I undertook to do in consultation with the Divisional Commanders, and the heads of the various arms, services and branches, by eliminating as far as was in my power, everything which was not conducive to efficiency in administration, training or fighting."[29]

The first organizational change that Currie had to ward off for it would have had a severe negative impact on command and control down to the brigade, and perhaps battalion level, was the British reorganization of their infantry brigades. Faced by a shrinking manpower pool, the British had decided to solve their reinforcement problem by reducing the size of their infantry brigades in every division from four battalions to three and urged Canada to do the same. This reduction measure would have freed up enough Canadian troops to field a Canadian Army of two smaller corps.

Currie, to his everlasting credit, refused to comply, though it would have meant an army command and promotion for him. He argued that there were too few trained commanders and senior staff officers to command an army, two corps, five or six divisions, and up to eighteen brigades. To do so would mean cannibalizing the existing formation HQs to accomplish what, in effect, was a doubling in size of the existing command and control structure for very little return in fighting efficiency (an actual increase of only eight battalions).[30]

Currie's counter-proposal was simple. Retain the Canadian Corps with its proven track record of performance and enhance its fighting capabilities by increasing the establishments of all his infantry battalions by 100 all ranks and by reorganising his engineer and MG establishments.[31]

With the reorganization of the BMG Coys into divisional battalions in 1918, though first proposed by Brutinel in Christmas 1917, brigades were being told what they had already known for a year—HMGs would be controlled at the divisional level. It was also obvious to all that the further expansion of the CMGC was driven primarily by the urgent defensive demands necessitated by the Germans' 1918 spring offensive and the persuasive influence of the newly-promoted BGen Brutinel.

LGen Currie, a former artillery officer turned infantry officer, later wrote that "the success of the German offensives emphasized the need for greater depth for defensive dispositions, which depend very largely on the stopping power of the machine gun." As each of his divisions was stretched during the crisis, allocated on average 10,000 yards of frontage, Currie felt compelled to "add a third company of four batteries to each battalion of the C.M.G. Corps, thus bringing to ninety-six the number of machine guns in each Canadian Division. This entailed an increase in personnel of approximately fifty per cent of the strength of each machine gun battalion."[32]

Currie did not wait for official British sanction but felt it necessary in a letter addressed to his divisional commanders to explain in some detail why he was taking away 50 men per battalion, having just recently increased their establishments by a hundred riflemen. He wrote:

> A short time ago, the strength of each battalion was increased by one hundred men and, in view of the increased firepower which the new machine gun company in each division will give, it is considered battalions will be agreeable to allowing these men to go. There are no trained machine gun replacements in England available at the present time so that the organization suggested must be improvised from resources here. I would like you take this matter up with your battalion commanders at once. While no doubt they will dislike losing their men from the infantry, I believe they will realize it is for the general good, and I would ask that you urge upon them to earmark fifty of their best and brainiest men for the purpose outlined above.[33]

Interestingly, Currie instructs his divisional commanders who will benefit directly from the restructure to take up the matter directly with battalion commanders, bypassing brigade commanders, who undoubtedly had a stake in the matter. The transfers were duly made but the CMGC historian noted that "it would be a pleasure to record at this point that all battalion commanders did earmark their 'best and brainiest' but that would be wide of the truth."[34]

Brigade commanders, whose formations' fighting efficiency depended upon strong and well-motivated infantry battalions were, no doubt, unhappy to lose 200 of their "best and brainiest" soldiers to a resource which had been already taken from their control almost a year earlier. To add insult to injury, the CMGC announced simultaneously with their new reorganization that the MG service "must be regarded as a distinctive arm with tactics entirely of its own." Additionally, "in all respects, it is intermediate between the Infantry and the Artillery, its tactics being radically different from the former, and approximating to but not being identical with those of the latter."[35]

The most important change in the Canadian infantry in 1918 was the increasing of their LMG establishment in the platoons from one to two guns in May 1918. Four guns were also added to the battalion HQs to provide a reserve, as well as an anti-aircraft capability, as open warfare would mean increased vulnerability to air attack. The total

number of Lewis guns per battalion was now 36, compared to 16 previously. This new establishment of course did not take into account the many unofficial Lewis guns that were already in use in the battalions.

Each infantry platoon was made up of 30 men: one officer, two sergeants, two corporals, two lance-corporals, and twenty-three privates, organized into two half platoons, each under the command of a sergeant and each formed of two sections, one of Lewis gunners and another combining riflemen and rifle-grenadiers. "Corps staff believed that a half-platoon was a strong fighting unit in its own right, complete with Lewis-gun support and under the command of an experienced non-commissioned officer," states Rawling. "That a half platoon of fifteen or twenty soldiers was considered a fighting unit in 1918 demonstrated the increase in fire-power available to the Canadian Corps in contrast to the situation of two years earlier, when it was considered impossible for a platoon of less than twenty-eight troops to function on the battlefield."[36]

With the organizational restructuring of the HMGs, Brutinel felt he had to spell out the command and control relationships between his new arm and the infantry from which it had sprung. His directive on command relationships did more to muddy the waters of command than clear them. He added to the perpetual confusion of the infantry when outlining when his HMGs were "attached", "in support" or "under command." Each of these terms are modern command and control terms, with their own specific and clearly understood meanings; however, in the Cinderella days of the CMGC the terms appear to have been interchangeable and thus, suitably ambiguous.

Firstly, Brutinel reiterated that the principle governing the employment of MG units was "to *support* (emphasis mine) the infantry in all phases of the fight and to cooperate constantly with them. But they are not part of the Infantry and must not be considered as such." He went on at length to explain that "A Machine Gun Commander should be given definite orders by the Infantry Commander, to whom he is *tactically attached*, as to what is required of him, but he should be allowed as much freedom of action as possible in carrying out these orders and should be kept informed of all changes and developments of the situation which may affect his action."

But it was the heading of "Liaison" which must have had some infantry brigade and battalion commanders biting their tongues when Brutinel stated, "in a retirement, the definite stopping power of the machine guns should be utilized by Infantry Commanders to the utmost. Infantry instinctively reform under cover of fire from machine gun batteries which are natural rallying points for them." It was Brutinel's opinion that it was "the duty of the Commander of the Infantry force to arrange, automatically, for the protection, particularly of the flanks, of any Machine Gun Units which are *cooperating* with him, and, in consultation with the Machine Gun Commander, make any definite arrangements for any advance, counter-attack or other tactical maneuver"[37]—a clear case of the tail wagging the dog.

While the CMGC historian might claim that all of these developments proved that "the Machine Gun Service had not only grown in stature but as well in status affecting its tactical independence and in the initiative and latitude defined in the employment of the weapon,"[38] Canadian MG doctrine remained primarily defensively-oriented. One sees definite parallels in Brutinel's thinking with that of the German defensive doctrinal emphasis on the importance of HMGs and HMG strongpoints sited in depth.

The last Hundred Days, however, would require a completely re-vamped approach to HMG tactics. There are strong indications that Brutinel's corps was not up to the challenge. After the battle for the Drocourt-Quéant Line (D-Q Line), Griesbach, now a brigade commander with a keen interest in MGs, would write: "The offensive use of our Machine Guns still leaves much to be desired. They followed along and took up

successive defensive positions...I am now of the opinion that having regard for the difficulties of transport and the apparent lack of a definite offensive doctrine, Machine Guns must be attached to Infantry and specific orders given by the Infantry Commander."[39]

After the battle of Cambrai, towards the very end of the 100 Days, BGen Hugh Clark, the new GOC of 7th CIB was blunt about the CMGC's performance. "The machine gunners worked extremely hard and were most willing to undertake all tasks allotted to them. Their defensive tactics were good," he acknowledged, "but *combined training with the Infantry is necessary before the best results in offensive tactics can be obtained*"[40] [author's italics].

Clark identified that the coordination and control of HMGs which Brutinel wished centralized at the divisional level now had to devolve down to at least the battalion level so they could be effectively employed by the commander on the ground. In an October 1918 "Lessons Learned in Recent Operations" Clark went straight to the heart of the matter, indicating that the coordination of the "new" arm was a major problem in offensive operations. While Brutinel's corps was technically competent, they were tactically incompetent. The commander of "The Fighting Seventh" wrote:

> It was again clearly demonstrated that there is not sufficient coordination. Machine gunners appear to be efficient in technical training, but look to the Infantry Commander to take the initiative in all offensive operations. The only cure for this is combined training when the Infantry is out of the line. At the present time it is unfair to expect the Battalion Commander to make the best use of a battery of Machine Guns. They are usually assigned to him at the last minute, and many good opportunities for their use in the offensive are lost because of the lack of training together.[41]

In particular, it was the command and control machinations of staff which failed to identify the potential potent role of HMGs in the upcoming offensive operations. This can be attributed partly to Brutinel and his senior MG officers' reluctance to relinquish control of their hard-won assets once the Corps required them to adapt to tactical necessity like everyone else. Invariably, it was Canadian infantry brigades and battalions that suffered. The principal foe blocking rapid advances in the last Hundred Days were fanatical German machine gunners, the elite of the German infantry. These veterans could have been effectively countered by aggressive HMG tactics on the part of the "innovative" CMGC. By comparison, it is significant to note that by August 1918, every British battalion had had an HMG section reinstated, thus giving British battalion commanders increased integral firepower and direct control over these sometimes errant weapons.[42]

A month later, the war would be over, and the CMGC would never successfully come to grips with its shortcomings during the last Hundred Days. While on one hand, it is historically vogue to praise the EMMA-GEES as being innovative and far in advance of their BEF counterparts, they proved in the end to be flawed in their tactical design for offensive operations. The CMGC remains, however, a good example of a "new" arm which evolved out of the trench stalemate and became an important solution to met the tactical demands of the defence and limited set-piece attack 1915-17.

About the Author...

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Health Services and from 2004 to 2007 served as SSO Military Training & Exercises at the HQ Supreme Allied Command Transformation in Norfolk, Virginia. Lt Col McCulloch's most recent book is the two volume set: ***Sons of the Mountains: A History of the Highland Regiments in North America, 1756-1767***. (NY & Toronto: Fleischmanns,; 2006).

Endnotes

1. Van Creveld, Martin L., *Command in War*, (Cambridge: Harvard University Press, 1985), 166-67. The author would like to acknowledge the assistance of a CFC colleague in the preparation of this article: Lt. Col. Ed Haverstock, PPCLI.
2. LGen Arthur Currie would write in *Canadian Operations During the Year 1918* [Interim Report] (Ottawa: Dept of Militia and Defence, 1920), 23, that "translations of captured German documents bearing on the latest tactics" were "carefully studied, and to a large extent, inspired our training."
3. Writers include: Jack English, *The Canadian Army and the Normandy Campaign: a study of failure in high command*, (New York: Praeger, 1991),17; Shelford Bidwell & Dominick Graham, *Firepower: British Army Weapons and Theories of War,1904-45*, (London: Allen & Unwin, 1982), 123; and Larry Worthington, Amid the Guns Below: The Story of the Canadian Corps, (London, Ont.: Hunter Printing, 1938), 236. For an interesting counterpoint, see T.H.E. Traver's article For a fuller discussion of this Darwinian thesis, see my Master of War Studies dissertation, "The Fighting Seventh: the evolution & devolution of tactical command and control in a Canadian infantry brigade of the Great War, (Kingston: RMC 1997).
4. Stevens, G.R., *A City Goes to War*, (Brampton: Edmonton Regiment Associates, 1964), 13 [hereafter *49th History*].
5. *Ibid*., 21; NAC RG 9 III D 3, Vol. 4940, *49th Bn War Diary* [hereafter *49th WD*], "Report on Operations of 49th Bn, 15th to 18th September 1916."
6. LCol C.S. Grafton, *The Canadian "EMMA GEES": A History of the Canadian Machine Gun Corps*, [hereafter *CMGC Hist.*], (London, Ont: Hunter Printing Co., 1938), 30.
7. *Ibid*., 29-30.
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9. NAC, RG 9 III D 3, Vol. 4983, *7th Canadian Brigade MG Company WD*, [hereafter *7BMG WD*], 1 April 1916.
10. *7BMG WD*, 24 April 1916.
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12. Bill Rawling, *Surviving Trench Warfare: Technology and the Canadian Corps 1914-1918*, (Toronto: University of Toronto Press, 1992), 38.
13. Currie cited in Rawling, 38.
14. Paddy Griffith, *Battle Tactics of the Western Front: The British Army's Art of the Attack*, (New Haven: Yale University Press, 1994), 130.
15. *49th WD*, "Rpt on Operations of 49th, 15th to 18th September 1916" dated 20 September 1916.
16. Griffith, *Battle Tactics*…, 130-31.
17. English, *The Canadian Army*, 17; Bidwell & Graham, *Firepower*, 123.
18. Ralph Hodder-Williams, *Princess Patricia's Canadian Light Infantry 1914-1919*, [hereafter *PPCLI Hist*], Vol. I, (Toronto: Hodder and Stoughton Ltd., 1923), 106; Bidwell & Graham, op.cit., 122.
19. *7BMG WD*, 27 January 1917.
20. Swettenham, John, *To Seize the Victory: The Canadian Corps in World War I*, [hereafter CEF], (Toronto: Ryerson Press, 1965), 253.
21. Grafton, 61.
22. Samuels, *Command or Control?*, 115-16; Grafton, 111.
23. Samuels, 116.
24. For an overview on the debates concerning the best roles and employment of Canadian HMGs on the Western Front, see Bill Rawling's "Technology in Search of Role: The Machine Gun and the CEF in the First World War," *Material History Review/Revue d'histoire de la culture materielle*, 42, Fall 1995, 87-100. MacNaughton and Brutinel would feud over the effectiveness of machine guns in the light artillery role right up until 1963. See John Sweetenham, *MacNaughton, Volume I: 1887-1939*, (Toronto: The Ryerson Press, 1968), 150-3 and 166.
25. Captain R.V.K. Applin, *Machine Gun Tactics*, (London: Hugh Rees, 1909); photo was donated to DHH by Dominique Baylaucq, a Brutinel relative, and is cited in Yves Tremblay's "Brutinel: A Unique Kind of Leadership" Chapter 3 in *Warrior Chiefs: Perspectives on senior Canadian military leaders*, Bernd Horn & Stephen Harris, eds., (Toronto: Dundurn Press, 2001), 57-69.
26. Morton, *When Your Number's Up*, 161; Rawling, *Trench Warfare*, 174-76.
27. *49th WD*, "Rpt on Ops at Passchendaele, 28/29 October 1917" dated 4 November 1917; Rawling, 175.
28. Grafton, *"EMMA GEES,"* 100-105.
29. Currie, *Canadian Corps Operations 1918*, (Ottawa: Dept of Militia and Defence, 1920), 3.
30. CEF, 231-32, Dancocks, *Spearhead to Victory: Canada and the Great War*. (Edmonton: Hurtig, 1987), 10-13; Stewart, op.cit., 184-86.
31. NAC, MG 30 E 100, *Currie Papers*, Vol. 27, File 7, Currie to O.E. McGillicuddy, nd.; *Canadian Corps Ops*, 3-4; CEF, 231-32.
32. Currie quoted in Grafton, *"EMMA GEES"*, 110.

33. *Ibid*., 110.
34. *Ibid*., 111.
35. *Ibid*., 120.
36. *Ibid*., 175.
37. *Ibid*., 120-21.
38. *Ibid*., 122.
39. *Griesbach*, Vol.5, "Rpt to 1st CID" dated 6 Sept 1918
40. Major Charles Bereford Topp, MS 004, Ops Orders Folder, "7th CIB Operations Before Cambrai-Lessons Learned" dated 14 October 1918, Black Watch of Canada Archives.
41. *Ibid*.
42. Griffith, *Battle Tactics*, 131; J.C. Dunn, *The War The Infantry Knew*, (London: Jane's, 1987) 183.

ARMY BIOGRAPHY: LIEUTENANT-GENERAL SAMUEL FINDLAY CLARK, CBE, CD

Mr. Robert Engen

Combat Camera ZK-1620

LGen Samuel Findlay Clark

The Canadian Army emerged from the Second World War into a world completely unlike that which had been left behind in 1939. The spectre of atomic warfare loomed unspeakably large over the postwar years, and as the brushfire wars of de-colonization began to proliferate, it became clear that a fresh new set of operational and tactical realities would confront the Canadian Army in the aftermath of V-E Day. It was during the uncertain, transitive time of the late 1950s and early 1960s, that the Army would begin to initiate a series of transformations that would reshape the land forces into the precursor of their present form. One of the main proponents of this transformation was Lieutenant-General Samuel Findlay "Fin" Clark, a senior officer during the war who came to the forefront of Canada's military development in the postwar period, eventually rising to become the Army's commander—the Chief of the General Staff—in 1958.

"Fin" Clark was born in Winnipeg on 17 March 1909, spending his early life and receiving his initial education there. He demonstrated an early talent for technical work which was to take him far later on during the war, and as a young man graduated with a degree in electrical engineering (BSc EE) from the University of Manitoba in 1932, and thereafter obtained a mechanical engineering degree (BSc ME) from the University of Saskatchewan in 1933. His military career began that same year, as he was commissioned as a lieutenant in the Royal Canadian Signals and served at Camp Borden, Ontario until 1937. That year, the same one in which he married Blanche Seagram, Clark was re-assigned to Army Headquarters in Ottawa as a technical officer in the Directorate of Signals. In August 1938, freshly promoted to the rank of captain, he was appointed associate professor of electrical and mechanical engineering at the Royal Military College in Kingston. At the time of his appointment, the Commandant of RMC was Brigadier H.D.G. Crerar, and the commander of the cadet company Clark was responsible for was Major Guy Simonds. Clark would find himself rubbing professional shoulders with these officers—Simonds especially—for the rest of his army career, particularly in the looming war.

When the Second World War did finally erupt, Clark, owing to his technical expertise, was removed from RMC and appointed adjutant of the 1st Canadian Corps Signals and served in that post in Canada until 1940. His dispatch to the United Kingdom to join the Canadian Army Overseas accompanied a promotion first to major and then to lieutenant-colonel by February 1941, when he was appointed to command the 5th Canadian Armoured Division Signals Regiment. His next move came in August 1942, when he was made a General Staff Officer at Canadian Military Headquarters in London.

During the long wait prior to seeing action against the Germans, Clark attended the staff course at Camberley, England (December 1942 to May 1943) and received his promotion to the rank of colonel while in attendance there. Upon completion of the staff course he was appointed Chief Signals Officer for the headquarters of II Canadian Corps, and with a surprising rapidity that was to be a hallmark of his career Clark received his promotion to the rank of brigadier-general in late January 1944, having gone from captain to brigadier in less than six years, with as of yet no direct experience in combat.

Clark remained with the II Canadian Corps HQ despite tumultuous house-cleaning that occurred there when Lieutenant-General Guy Simonds took command in late January 1944. Simonds, according to Clark, met with his staff officers shortly after his arrival, saying: "Good morning, gentlemen. There are some of you in whom I have not much confidence. I will see you all individually the next day and tell you why." Simonds sacked the corps' Chief Engineer, the Chief Medical Officer, and the Commander Corps Royal Artillery; Clark, owing to his own considerable skills and his previous acquaintance with Simonds, stayed on at the headquarters. He retained his position with II Canadian Corps, in fact until the end of the war, and was part of the victory campaign in Northwest Europe. For his services during the war, Clark was made a Commander of the Most Excellent Order of the British Empire (CBE), was awarded the Order of Orange Nassau, Degree of Commander, from the Netherlands, and held the Legion of Merit from the United States.

Following the war, Clark played a significant early role in the formation and solidification of Canadian connections with the international security networks being developed across the north Atlantic, particularly NATO. In September 1945, Clark returned to Canada from occupation duties in Germany and was appointed Deputy Chief of the General Staff at Army Headquarters in Ottawa. His repatriation was short-lived, however: in 1948 Clark was one of the Canadian officers sent to attend the Imperial Defence College at Seaford House in England. Upon completion of the IDC course, he was appointed Canadian Military Observer on the Western European Union Military Committee, one of the forerunners to the coming NATO alliance. Clark was part of a predominantly American military delegation to the WEU, which was present to observe and consult, but was not formally a part of the WEU defence scheme against the Soviet Union. As Clark would have seen for himself, these preparations, being made in combination by Britain, France, and the Low Countries, were simply not tenable given the dominant continental position of the Russians, and would be doomed to fail without committed military support from the North American nations. The WEU consultations eventually laid the groundwork for the negotiation of the NATO treaty in 1949.

Clark remained the go-to man for the emerging alliance framework and continued his overseas work as the first Canadian military representative to the North Atlantic Treaty Organization in London in November 1949. In the previous month he had continued his explosive scaling of the military hierarchy with his promotion to the rank of major-general; at 40 years of age, he was the youngest officer who had ever attained that rank in Canadian history. As Canada's representative to NATO during the alliance's early formative years, Clark was part of the active planning for the defence of Western Europe and helped to bring about the 1951 commitment of the 27 Canadian Infantry Brigade to Germany as part of the land force defence and deterrence against the Soviet Red Army. This was a period of considerable uncertainty in the NATO countries, with conflicting defence plans and the lack of an overall command structure suited to coalition warfare. However, by the end of Clark's appointment to NATO in May 1951 small group committees had succeeded in formulating the structure of the new command system, the Allied Command Europe (ACE) and its new headquarters, the Supreme Headquarters

Allied Powers Europe (SHAPE), which were formally activated by General Eisenhower in April 1951. Both of these structures reflected significant elements of prior WEU defensive planning.

After the formation of SHAPE and his reassignment from the NATO position, Clark was briefly appointed Chairman of the Joint Staff at the Canadian Army Liaison Establishment in London, and appointment that did not last long before Clark returned to Canada to take up the position of Quartermaster General of the Canadian Army in Ottawa, in August 1951. He served in this capacity until 1955, when he was appointed General Officer Commanding, Central Command, at Oakville, Ontario.

The height of Clark's career came upon his promotion to lieutenant-general and assumption of the position of Chief of the General Staff, the Army's top command, in August 1958. During his term as CGS, Clark oversaw a period of restructuring of the Canadian Army with a view towards increased mobility and enhanced flexibility, and the implementation of new tactical doctrines focused upon the effects of nuclear weapons on the battlefield. At his instruction a new Canadian Army training manual for atomic warfare was issued in 1959 that emphasized the tactical impact of nuclear weapons that Canadian soldiers could expect to face in future battles. The 1960 publication of *The Infantry Brigade Group in Battle*, a Canadian Army operational doctrine pamphlet, further detailed the tactical employment of forces on a nuclear-ravaged battlefield, and how forces could both apply and exploit the effects of these weapons. While this may be an unrealistic proposition in hindsight, the tactical use of nuclear weapons was seen as a force equalizer at the time for the NATO militaries, which faced an overwhelming quantitative disadvantage when facing the Soviet Red Army in Europe.

Simultaneously, Clark, as CGS, was faced with the necessity of restructuring the Canadian Army to meet the demands of the government which, in early 1958, had announced the formation of a Canadian UN Standby Force for rapid deployment overseas as part of peace-support operations. As of the announcement, however, no such force actually existed, and the job of creating one largely fell to "Fin" Clark and his staff, who operated in a conceptual vacuum in terms of what the government wanted such a force to consist of. Under Clark's aegis the idea of the Standby Force as a flexible, highly adaptive formation that could be mixed-and-matched according to mission parameters was first explored, although it was further developed and implemented by his successors.

When Clark stepped down from the CGS position in October 1961, pending his own retirement, he was succeeded by Lieutenant-General Geoffrey Walsh, with whom he had served in Simonds' II Canadian Corps HQ. In retirement, Clark was chair of the National Capital Commission, overseeing many major projects, including the creation of the Garden of the Provinces (now the Garden of the Provinces and Territories) opposite the Library and Archives Canada building in Ottawa.

NOTE TO FILE—THE CHALLENGE OF CENTRALIZED CONTROL FACED BY THE INTELLIGENCE FUNCTION IN AFGHANISTAN

Sergeant Marcus Sterzer, CD, B.A.; Master Corporal Patrick McDuff B.A., M.A.; and Corporal Jacek Flasz

From rugged and untried terrain to strange and unfamiliar cultures, from sudden ambushes to IEDs hidden near side roads, combat troops outside the wire face a diverse range of dangerous obstacles in Kandahar Province. To help them counter those obstacles, the intelligence officers and non-commissioned officers (NCOs) in theatre set out to collect, analyze and disseminate information critical to their security and safety as well as to the success of the mission. However, as much as the Intelligence elements in Afghanistan venture to assist and support the troops on the ground best they can, there are numerous challenges basic and complex, faced by the intelligence personnel in theatre. The way to meet these challenges is clearly identified in the "8 principles of Intelligence" (see Table 1). For this article, only the first, and arguably the most vital, of the principles will be focused on: centralized control.

The Problem: Not Enough Centralized Control

As per joint intelligence doctrine, centralized control is described as follows: *Intelligence is centrally controlled to avoid unnecessary duplication, provide mutual support, and ensure the efficient, economic use of all resources*. By this definition, the current Intelligence architecture in Joint Task Force Afghanistan (JTF-Afg) falls short of this ideal, and hinders the proper functionality of the intelligence cycle.

1	Centralized Control
2	Timeliness
3	Systematic Exploitation
4	Objectivity
5	Accessibility
6	Responsiveness
7	Source Protection
8	Continuous Review

Table 1: The 8 Principles of Intelligence

The purpose of this article will be to review the level of centralized control only at the Joint Task Force level, where two organizations with overlapping responsibilities support one commander, yet split collection assets between them: The All Source Intelligence Centre (ASIC) and the J2 section. As it stands now, there are personnel redundantly employed and multiple examples of duplication of effort and slow, cumbersome coordination with the current architecture. While individual solutions to individual problems that arise because of duplication can be and have been implemented on a one-by-one basis, to address the root cause of many of the problems arising from a lack of centralized control, this article will propose a doctrinal-level change in the intelligence architecture that would mitigate the majority of these issues.

Given that some decentralization is necessary, the current architecture has a number of discrete organizations spread across the entire task force serving a number of critical functions. It is also fundamental that commanders, at both the unit and task force level, have their own intelligence staff to keep them informed, report their unit's observations / assessments, and set collection or production priorities. They must produce tailored products that meet their particular commanders' / organizations' needs. Naturally, the size of these staffs will be dependent on the responsibilities and scope of the unit and commander supported. However, this requirement does not mitigate the need for centralized control by any means, and the joint task force commander should have one robust agency providing advice, rather than two understaffed and redundant agencies splitting resources between them.

The Proposed Solution: Merge the J2 Section and the ASIC

The solution to the current problem is simple, if unorthodox; the J2 Section should be dissolved, and its manpower and assets absorbed into the ASIC. Current doctrine dictates that the commander and staff are to be supported by a robust J2 section with its own integral collection capability. However, our doctrine is not working as well as it should. It is counter-productive to keep an intelligence architecture that does not work as efficiently as possible only because it is doctrinal; when this is the case, doctrine must be amended or it will be discarded over time for the sake of operational expediency. The J2 section should be merged with the ASIC, and the robust, newly augmented ASIC should be the chief engine of the Sense function and the nexus for providing advice to the commander and his staff. Keeping the two organizations separate, yet constantly taking steps to mitigate the problems that arise from this duplicate architecture requires a significant amount of liaison and coordination, taking up valuable manpower and time.

The intelligence, surveillance, target acquisition and reconnaissance (ISTAR) section, currently attached to the Task Force J2 section, should be moved to the ASIC as well. The analytical staff for each organization should be grouped together to ensure an economy of effort and allow centralized control. Should there be surplus personnel in any particular function, they should be moved to address manning shortfalls either within the expanded ASIC or elsewhere in the task force's intelligence architecture.

In order to support the task force operations and plans staff, this enlarged ASIC would provide additional officers (perhaps on a rotating basis) and junior NCOs to the Provincial Operations Centre (POC). This would reduce the presence of what was once the J2 staff in JTF Afg HQ, while providing an unreduced level of support to operations and planning given the economy of effort that would come from centralization.

To reflect the increased responsibility of the ASIC CO, he or she should hold the rank of lieutenant-colonel, similar to the other units in the task force. If the task force commander insists on keeping an officer as a J2, he or she should hold the rank of major. This change would reflect the proven effective relationship that the logistics branch has demonstrated with the relative ranks of the Brigade J4 and the CO of a service battalion; the CO of the capability is traditionally superior to the commander's advisor. In our current intelligence architecture, for some reason we have inverted this time-tested relationship.

There are reasonable arguments that can be made for the status quo. For instance, the ASIC as a unit in its own right, currently has no official authority to task collection assets at a parallel unit such as the battle group (BG), NSE, PRT etc. The J2 in our current architecture is capable of directing all units in the task force to ensure centralized control of collection. Grouping the ASIC and J2 sections into one entity would raise the question; how would the new, amalgamated ASIC (itself a line unit), task the BG or NSE with collection or intelligence production tasks? Thankfully, there is a fairly painless solution for this issue.

First, it would be simple enough for the ASIC officers and NCOs who are assigned to support the POC to handle the responsibility of directing operational level collection tasks to the units as long as they are aligned with the approval authority. This could result in a slightly longer tasking process, but nonetheless significantly faster than the coordination currently required in order to prevent the duplication of effort that plagues us now. More importantly, it would also be a legitimate tasking system with the full authority of the task force behind any collection or production tasks. Alternatively, the Chief Ops could give blanket approval for collection management and tasking of BG / NSE / PRT / OMLT assets to the AISC for limited periods of time.

If blanket approval for collection is not given, an alternative is for the Task Force to generate orders for certain sub-units to transfer collection assets "taccon" or "opcon" to the ASIC when responsiveness is especially critical. There is precedent for this already, as the road goes both ways.

Ultimately, the meager advantages of keeping a separate J2 section at the task force level do not outweigh the disadvantages the status quo. Likewise, there are significant advantages to dissolving the J2 section and consolidating assets and manpower in the ASIC.

Effects of Merging The J2 Section With the ASIC

Duplication of Production Effort: In theatre, a division of labor allows for each specific intelligence organization to work on different aspects of intelligence, including force protection, battle tracking, situational awareness, and strategic / operational / tactical analysis. This focus should also be divided into current and basic intelligence.

Current Intelligence: "Intelligence which reflects the current situation at either strategic or tactical level"
Basic Intelligence "Intelligence, on any subject, which may be used as reference material for planning and as a basis for processing subsequent information or intelligence"

Table 2: Current and Basic Intelligence

Current intelligence has a greater requirement for timeliness than basic intelligence; therefore, the intelligence personnel in theatre should be focused almost exclusively on the former, while basic intelligence would be provided almost entirely by out-of-theatre personnel. This would allow for the already thin analytical capabilities in theatre to focus on actionable current intelligence. Meanwhile, the out-of-theatre intelligence assets could focus on operational and strategic level analysis.

The amalgamation of the J2 section and the ASIC would establish centralized control over the production effort, and would reduce the redundancy between the other organizations and the task force's intelligence effort. There would be fewer gaps in production as well, provided the expanded ASIC and other allied / national intelligence agencies established a clear division of labour between them.

Multiple Discrete and Incompatible Collation Systems: Collation is arguably one of the most basic and fundamental of the intelligence tasks, as it ensures that information is not only gathered and stored properly and concisely, but is also delivered and/or accessible to the appropriate personnel for analysis and scrutiny. With numerous international mission intelligence organizations present in theatre, it is normal that there will be a multitude of collation systems, each group focusing on their respective areas of responsibility. That being noted, on a contingent level there is no need for multiple collation cells within the task force. However, as it stands now, several organizations have collation staffs as well as different collation systems; that in itself not only renders information duplication an everyday reality draining valuable manpower and resources, but it also contributes to wasteful circular reporting (discussed in greater detail below).

The ASIC gathers each and every bit of information from every possible source and continuously monitors all networks. The merging of the J2 section with the ASIC would include the fusion of their two separate collation systems, thus reducing the problem to one less redundant and isolated collation system. To achieve task force-wide access to this single beefed up collation system, the use of a format such as WIKINT[1] should be implemented on a network accessible to all units and sub-units; this would make all information easily accessible to the different intelligence as well as operations elements.

This, in turn, would make intelligence production, coordination, and especially dissemination of information much easier, and would trim down and eliminate to a great degree constant circular reporting and duplication of production effort.

Redundancy and Circular Reporting: Circular reporting will always be an issue in the intelligence function. One single event can and will be reported in a dozen different products (INTSUMs, INTREPs, DSRs, etc) and then re-reported yet again in the near future. Furthermore, because there are few standardized products and templates for modern counter-insurgency (COIN) agreed upon by all the nations contributing to ISAF, some organizations omit to put the source of the information whereas others rewrite the information itself (occasionally with mistakes or changes). For an analyst, this is a major problem to say the least. The screening process of the information as well as its analysis requires an immense amount of focus and crosschecking, taking time that could be better spent on more vital tasks.

The amalgamation of the ASIC and J2 would not eliminate this problem, since we have no control over our allies or other external reporting agencies. However, we can eliminate at least one source of internal circular reporting by having a single, common analytical and production effort to support the task force commander and his or her staff.

Duplication of Request for Intelligence (RFI) Management: The RFI system has been designed to help commanders get critical information that could help them understand and define a specific subject through the use of another unit or formation's assets and resources, which are for the most part scarce, yet in high demand. At this moment, there is a duplication of the RFI system between the J2 section and the ASIC. This not only siphons the time and effort of the organizations involved, but also renders the process redundant. The RFIs submitted to the J2 shop often ends up being forwarded to the ASIC. Thus, even with the use of powerful RFI management tools, the J2 remains an unnecessary middleman.

A tasking chain of Byzantine complexity has developed for RFIs that must leave the task force. The complexities arising from multi-layered tasks that must go to agencies in ISAF, Canada, and within the task force, dramatically slow RFI response time and complicate tracking. On other occasions, requestors will submit an RFI to both the ASIC and the JTF Afg J2, not knowing which agency is ideal to answer their query or which may do it best. This frequently generates duplicate taskings and complicates tasking collectors/producers. Lastly, with two RFI managers, there are two different and discrete processes of prioritization, which may result in conflicting priorities being given to the collectors/producers.

In order to avoid this glitch and stop draining time and manpower of two organizations, there should be one CCIRM/RFI management authority in theatre that is accessible to all. The merging of the J2 section with the ASIC would naturally result in the fusion of the RFI processes, and truly deliver a "one-stop shop" for all RFIs from both within the task force and from external agencies. This will make the process simpler for customers, eliminate double tasks, and allow the rational prioritization of RFIs by a single authority.

Uncoordinated Collection Management / ISTAR: Collection management is defined in the joint intelligence doctrine manual as *…the process of converting intelligence requirements into collection requirements, establishing, tasking or coordinating with appropriate collection sources or agencies, monitoring results and retasking, as required*. However, when there are multiple collection managers with assets divided between them, it results in a disjointed collection effort. This makes coordinated tasking, and coverage of gaps quite difficult.

The J2's ISTAR section controls a number of ISTAR platforms. Though these assets are vital and effective, they are currently not grouped at the natural intelligence nexus that is the ASIC. As it is now, with certain collection assets falling under a different tasking chain, the coordination and synchronization process is difficult and problematic. For example, a requirement for imagery over a certain area could be met through the ASIC's resources, or through ISTAR assets. Because of this, here in theatre we have witnessed collection tasks being bounced from one to the other organization as each was "too busy" to handle the task, while they duplicated each other's effort by working independently on another task of perceived higher priority. Were these assets grouped together under a single tasking chain, this would not have happened. Thus, in order to avoid miscommunication, task redundancy, delays and missed opportunities, it is preferable that all collection capabilities, from both ISTAR and ASIC, fall under the same command. This will allow better synchronization, scheduling, and more complete coverage of named areas of interest (NAIs) / responses to intelligence requirements (IRs). While it is possible to use frequent liaison and coordination to mitigate this problem, a single collection management authority would be much more efficient.

Conclusion

There is a natural trend in the intelligence community to decentralize, punctuated with occasional authority imposed direction to re-centralize. One of the most prominent examples is the national coordination of the United States' intelligence effort. The Americans after the Second World War established the CIA to be just that; a central intelligence agency, one that would coordinate and pull information from all other intelligence organizations. However, they slowly evolved, adopted a more operational mandate, and were no longer central in their control over other organizations. The US intelligence community had decentralized over time. Thus, sixty years after the creation of the CIA, the United States was compelled to restore centralized control by creating the Director of National Intelligence (DNI), and giving the new authority a mandate eerily similar to the original.

Likewise, on a smaller scale (and in a much shorter period of time), Canadian military intelligence in Afghanistan has followed a similar path; We established the ASIC concept in 2002, and designed the organization to be a singular nexus of collection, processing and dissemination; the current architecture, with collection assets, analytical power and collation cut off and integral to a separate J2 section has strayed from the first principle of intelligence. We believe it is time to return the ASIC to its "all source" status. If this change would violate CF intelligence doctrine, then doctrine must be changed.

In conclusion, it is evident that there is a variety of challenges that the intelligence function faces in Afghanistan. By failing to closely adhere to the first principle of intelligence, the other 7 principles are affected by consequence. In fact, not only does this impede on the tasks themselves, but also on our capacity to provide timely and reliable intelligence to fighters, staff officers and decision makers. We must use the most effective architecture to apply the principles of intelligence, in order provide the best support the commanders and the soldiers in the field.

Endnotes

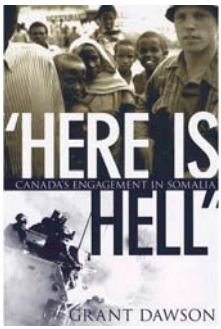
1. WIKINT uses the same concept of WIKIPEDIA© which is a living encyclopedia that permits users to add information and contribute improvements to the content that is easy to browse and accessible to everyone.

— BOOK REVIEWS —

HERE IS HELL: CANADA'S ENGAGEMENT IN SOMALIA

DAWSON, Grant. Vancouver, UBC Press, 2007, 230 pages.

Reviewed by Major Andrew B. Godefroy, CD, Ph.D.



In December 1992 Canadian Forces (CF) were deployed to the war torn country of Somalia as part of a coalition task force ordered to return the failed humanitarian assistance apparatus to operational status. At the time no one could have imagined that the seemingly 'typical' United Nations mandated mission would serve as the backdrop to one of the most serious incidents in the history of the CF. The events that transpired in Somalia and the subsequent fallout from those actions overshadowed just about all other CF activity then underway during the mid-1990s, and the effects of those events are still felt within the army even today.

The CF deployment to Somalia also remains a subject that few scholars and academics have felt comfortable approaching. Grant Dawson, however, has not retreated from the challenge of examining this controversial subject in his most recent work, *Here is Hell: Canada's Engagement in Somalia*. What readers will find immediately appealing about his effort is that Dawson has not simply offered up yet another narrative of cheap controversy; rather, he has taken careful steps to identify, examine, and analyze what led to the decision to deploy military forces to Somalia. The results are very telling of a much more complex chain of events than previous accounts have suggested.

At ten chapters, the diversity of content may appear daunting at first, but Dawson has delivered well thought out subjects in short yet very detailed and readable sections. He also tackles difficult issues from the very outset. *Here is Hell*, is one of the first books, for example, to explain in detail how the CF recommended against deploying to Somalia. Ambiguous direction from the United Nations and nebulous roles for the military in restoring hope to this region made an already difficult choice to intervene even more complicated. The CF was disinclined to commit military forces, but the government overrode this advice, Dawson suggests, in the interest of showing the Canadian public it was committed to action. Successful in describing this complex political-military environment, Dawson further enhances his own analysis with a detailed examination of the creation and evolution of the Department of National Defence's first post-Cold War joint staff apparatus at National Defence Headquarters and the challenges it faced in commanding and controlling the Somalia mission.

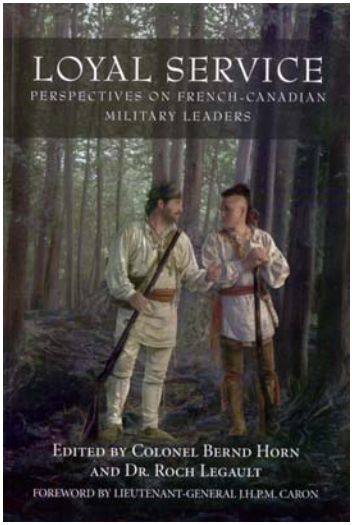
With the book's main focus on "the road to deployment," unfortunately much less attention is given to the actual execution of the military mission itself. Only the last chapter examines the events and activities of the Canadian Joint Force Somalia, and it wraps up the final analysis of the whole subject too quickly without giving enough time or space for a proper closure. This is perhaps the only real fault of what is otherwise a very well researched and well written book, but it would have served the overall study better if more space and analysis had been devoted to the outcome of those policy and military decisions.

Overall, Grant Dawson is to be commended for this study of the Canadian engagement in Somalia. Objective and dispassionate, he has made a real contribution to better understanding the policy and military decisions that led to this infamous mission. *Here is Hell* is a worthy addition to the field and recommended reading for those interested in Canada's early post-Cold War international relations and military command and control.

LOYAL SERVICE: PERSPECTIVES ON FRENCH-CANADIAN MILITARY LEADERS

HORN, Bernd, LEGAULT, Roch. Toronto, The Dundurn Group, 2007, Soft Cover, 336 pages.

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



Potlucks likely originated with the pioneer challenges of feeding the neighbours while raising a new structure on the homestead. This book is also a pioneer effort, an important start, on covering French-Canadian military leadership. The varied contributions, providing case studies that range across several centuries, are also potluck.

Army readers may well say the two chapters devoted to French-Canadian leadership in the conduct of "La Petite Guerre" constitutes the main course. Indeed as one of the two authors notes, "the raiding tactics… are familiar to us from the daily news bulletins". Rogers, belonging to the winning side, may have garnered the fame and lent the Ranger name to modern American Tier 2 Special Operations units but Rogers was twice defeated by the French-Canadian, Langis. French-Canadian tactics, it is suggested, perhaps not good news with the ongoing insurgencies, forced Britain to a doctrine of overwhelming superiority.

Langis led, as did other French colonists such as Marin, individuals with self-reliance, confidence and initiative not to mention special skill sets from not only the colony but from allied First Nations and even on occasion from France itself. As the editors note in a "Foreword", which more than adequately serves as an appetizer, "leadership is not constrained by the limits of formal authority". Command of such raiding parties could only be achieved by "leadership" and not by "management" nor by resort to "authority".

The slightly older members of the Army audience could consider the chapter on "JDX" the principal dish. I am sure that many of those who served in the Army of the 70's, as I did, will no doubt have squirreled away a copy of General Dextraze's *The Art of Leadership (1973)* distributed as a Canadaian Forces Personnel Newsletter when he was Chief of Defence Staff (CDS). This book contains a chapter on Dextraze which I appreciated much more than the essay on his Congo experience which appeared in *Warrior Chiefs: Perspectives on Senior Canadian Military Leaders*. JDX started in the Reserves, was not in the Army between the years 1945-1950 and never attended a prestigious military school. JDX is an inspiration for all those who never punched the appropriate tickets.

The Royal 22nd Regiment (R22eR) is part of the very fabric of our Army. Thus it is more than fitting that the officer associated with the World War I origins of this unit, Thomas-Louis Tremblay, should have a chapter devoted to his command of this battalion from January 1915 until promotion to Brigadier in August 1918. It is no wonder he followed Field Marshall Foch as the second Honorary Colonel of the R22eR. He was an engineer and left the Army in 1919, rejoining in 1939, as he had in 1914, serving as a Major-General in the Second World War in Canada.

Potluck usually means variety in preparation. The Tremblay chapter utilizes his personal diaries and the author shares his views on such use. On the other hand Desmond Morton displays all his extensive history writing craft in making a case that Adolphe Caron is Canada's most successful war minister, supported by five and half pages of footnotes.

The attractive offerings cover a range of tastes. Serge Bernier, who has written about Army officers, perhaps most notably General Allard, provides an illustration of how autocratic can be balanced with democratic leadership using the case of Air Force General Claude LaFrance, who flew fifty combat missions in Korea.

The question of French-Canadian leadership in a Canadian navy born of Royal Navy traditions is touched upon in yet another essay. The author's conclusion is that "institutional barriers did exist". Hopefully this is still not the case.

An example of French-Canadian leadership, pre-World War I, is provided in an account of Colonel Oscar Pelletier who served both in the North West Rebellion and the Boer War. His career overlaps that of Major-General Lessard who also served in the Boer War, and subsequently in Canada during the First World War.

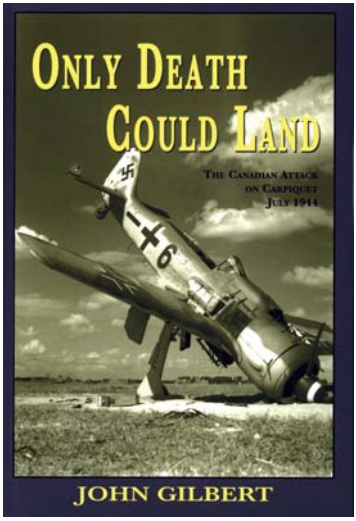
A more specific study on who was selected to lead the militia between 1790 and 1839 in Montreal might serve to remind us that selection of leaders is a challenge that must factor in more than just merit. Amazingly, there is information from 200 years ago that permits analysis of why. Two hundred years from now will our electronics permit similar studies?

For those who missed the essay in *Warrior Chiefs*, Carol Off's General Dallaire piece is reprinted in this volume, a book worth the price for the main course alone.

ONLY DEATH COULD LAND: THE CANADIAN ATTACK ON CARPIQUET, JULY 1944

GILBERT, John. Gargunnock Books, Distributed in Canada by Vanwell Publishing, 2006, 159 pages. $25.95 CAN

Reviewed by Neil Chuka



The ultimate objective of the Third Canadian Infantry Division for D-Day was the area to the west of the city of Caen. Specifically, the Canadians sought to attain the area just north of the Caen-Bayeuex highway, the village of Carpiquet and the adjacent airfield. Caen was the logistical and administrative keystone to the Normandy region. As long as the Germans held the city the allied breakout from the beachheads would be delayed. Lying to the west of the city, Carpiquet was directly in the path of the Canadians seeking to assist in the planned encirclement of Caen. As it turned out, Carpiquet and Caen would remain in German hands for more than a month after the D-Day landings. Not until the first week of July would Carpiquet village be captured. The airfield itself would not completely fall to the Canadians until after Caen fell.

Dubbed Operation Windsor, the attack on Carpiquet was a component of Operation Charnwood—the attack

on Caen which kicked off on July 8, 1944. Operation Windsor, particularly the assault across the flat airfield itself, was a bloody affair in which the Germans ranged interlocking fields of pre-sited machine gun, artillery, and mortar fire against the North Shore, Queen's Own Rifles, Royal Winnipeg Rifles, la Chaudiere, and Fort Garry Horse Regiments.

The assault on Carpiquet is one of the many smaller actions that comprised the Normandy campaign receiving relatively little attention from historians. John Gilbert, an amateur British historian, has sought to redress this oversight in his book *Only Death Could Land*.

Gilbert is to be lauded for pointing out the gaps in the literature on the Normandy campaign. However, his book lacks focus and rigour, ultimately detracting from the author's credibility. For example, on page 14 Gilbert poses no less than seven research questions, an astounding number for a book of only 159 pages. The resultant lack of focus makes for difficult reading. Indeed, the author wanders through background material for the first third of the book, discussing subjects that at best, properly belong in appendices.

Furthermore, the author employs some questionable literary techniques. For example, Gilbert writes, "Using sketches and comic strip features, the press really went to town." (p.44) and later on, "In a disastrous error of judgement, Montgomery missed the boat." (p.68). The use of modern colloquialisms is inappropriate for a serious study.

Another questionable device eroding the rigour of the book is the assumption of thoughts possessed by personalities in the narrative. Among other examples, Gilbert, with no supporting documentation, claims, "[SS Brigadefuhrer Kurt] Meyer would have been especially mocking of Reichsmarschall Goering's pre-war ranting boast that the world would be stunned by the readiness of the Luftwaffe…" (p.59) and "with memories of their enrolment and their Hitler Youth oath of allegiance to their master, Adolf Hitler, these grenadiers continued to harass the British..." (p.61).

Finally, there are a few simple factual and typographical errors such as the assertions on page 33 stating, "the basic infantry weapon that was used by all sides of the…Second World War was the bolt-action, single-shot rifle, which was fed by a five round magazine" and "the British and Canadian infantry were supplied with the tried and tested British SMLE Mark V Lee-Enfield rifle, which used 303-calibre ammunition…" The standard American rifle was the semi-automatic M1 Garand which had replaced the Springfield M1903 as the basic infantry weapon of the US forces by 1942. The M1 was fed by 8-round internal magazine while the No.IV, Mk.1 Lee-Enfield, the basic infantry weapon of all commonwealth forces in Europe (although many continued to carry the older No.I Mk.III) fired .303 inch ammunition fed by a 10-round box magazine. The No.V was a shortened and lightened carbine for use in jungle environments. This may seem to be nitpicking but accuracy in detail is the mark of a valuable book, and these are basic details which should have been caught in the editing process.

Gilbert, admittedly an amateur historian, should be applauded for tackling the subject and should not be discouraged from trying to produce another, more focused edition. However, should this occur, it is suggested he find a talented editor and maybe an experienced mentor who could guide his efforts.

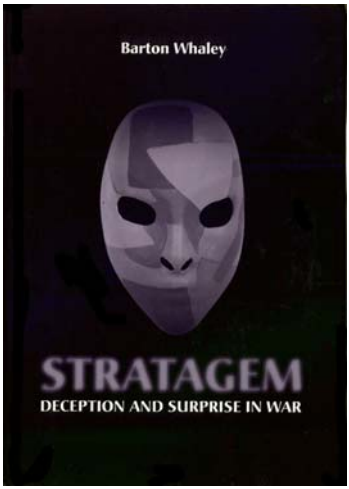
STRATAGEM: DECEPTION AND SURPRISE IN WAR

WHALEY, Dr. Barton. Artech House, Boston, London, © 1969, 2007 (Originally published in 1969 by the Center for International Studies at MIT, 560 pages

Reviewed by Mr. Vincent J. Curtis

In war, truth is so precious it should be attended by a bodyguard of lies.

Winston S. Churchill



Dr. Barton Whaley is a research professor in the Department of Defense Analysis at the United States Naval Postgraduate school, and is a consultant with the National Intelligence Council's Foreign Denial & Deception Committee. His book Stratagem was originally published in 1969 and was republished in 2007 entirely unchanged, right down to the typos. Dr. Whaley waited until he reached the ripe old age of 41 before he felt he had acquired the necessary mix of academic disciplines to publish this comprehensive work on military deception operations. He records that expertise in the physical sciences, bacteriology, philosophy of science, sociology, political science, as well as history, linguistics, anthropology, and geology were necessary for him to write an authoritative text on the detection and analysis of deception in war.

The book is divided into three parts: theory, case studies, and an extensive bibliography. Dr. Whaley believes his research method, a "model, a set of methods that underlie and pervade the entire work" is yet another part that constitutes the real value of his work, providing a "template of how to study and analyze deception operations."

This massive work of philosophy and analysis is not a book for division commanders. It will have value for the intelligence staffs of army, theatre, and national command formations. Dr. Whaley may have created a template for analyzing deception operations, but the eminently useful matter of how to undertake them is not well revealed. The insuperable problems confronting an academic study of this type is how to teach shrewdness, and how one can overcome engrained beliefs in the absence of satisfactory contra-indicating data.

The value of the book for soldiers, and especially flag-grade commanders, is that it encourages them to use deception, ruse, and stratagem both in attack and defence routinely as a means of reducing friendly casualties and for increasing the chances of success. Deception is done, positively, by feeding the enemy commander false intelligence indicators, and, negatively, through security measures.

Dr. Whaley would advocate that every operations order for a significant mission include a deception plan as standard operating procedure, even if some missions are so important and secrecy so necessary to the success of the deception, that only the fewest people at the highest levels of command actually are in the know. In this case, even at the highest levels, the operations order might itself be a ruse that keeps the real plan from those who don't need to know.

The common objective of deception operations in the attack is to dislocate the enemy force prior to battle, and to keep them dislocated even after battle commences.

Dislocate is used here in its positive sense, and is a term familiar from manoeuvre warfare theory. In this case, dislocate means the enemy willingly places his troops in the wrong position to meet the coming attack on the basis of the false intelligence picture he has before him. In the defence, the objective is to hide from the attacker the real strength of the defender, so as to lure the attacker into an ambush, or, disguising weakness, to deter him from attacking. [Measures similar to these are Standard Operating Procedures (SOP) in Canadian tactical doctrine, and Whaley's innovation is to advocate deception as SOP at the strategic level.]

At the national command level, the objective of deceiving the enemy—that is, other states—is to gain some advantage at the strategic or the grand strategic level. The objectives of national deception operations are as numerous as there are objectives of policy.

Although the book contains some 110 case studies from 1914 to 1968, it only mentions in broad outline the commonest techniques of deception. For all its length, *Stratagem* is not a cookbook for deception operations. The case studies are intended to support the proposition that great success is the result of the use of stratagem.

Dr. Whaley makes a number of errors in philosophy and analysis in the course of his work. In the theory part, he equates surprise with deception, and says that one should look for deception in cases of unexpected success or unexpectedly large success in a military operation. This equation gives rise to the false argument that if great success is caused by surprise and surprise is caused by stratagem, then great success is caused by stratagem. Now, great and unexpected military success is almost always attended by surprise, and deception is meant to remain undetected, so any great success can be claimed to be caused by yet un-revealed deception.

The error is that while deception can cause surprise, surprise is not always caused by deception. Dr. Whaley tries to stretch the definition of deception so that deception incorporates nearly all the causes of surprise. To do this he posits the assumption that the enemy ought to know, and if they don't know it is due at the minimum to friendly security, the passive kind of deception. He introduces a still more general term, stratagem. If the enemy ought not to be surprised, stratagem in its broadest sense covers any bit of cleverness that causes surprise that isn't a kind of deception.

With stratagem, the author may be trying to cover too much with a single term. The intellectual problem with making stratagem practically coterminous with surprise is that it reduces the useful encouragement a commander should, whenever possible, employ stratagem to the trivial statement a commander should, whenever possible surprise the enemy.

This overbroad meaning of stratagem leads Whaley to hold that a line of operation which places the enemy on the "horns of a dilemma" is a kind of stratagem, and cites General William Tecumseh Sherman's post-Atlanta operations as the quintessential example. Dr. Whaley is a fan of B. H. Liddell Hart, and of his work, *Strategy: the Indirect Approach*. Liddell Hart's *Strategy* was an inspiration for Whaley's *Stratagem*. Whaley holds that Liddell Hart's "horns of a dilemma" (a term borrowed from Sherman) is the essential reason stratagem works: if the enemy has to protect himself against two or more courses of action, there is at least a 50:50 chance he'll guess wrong, and the odds can be made even steeper if he is subjected to active deception operations.

Whaley wrongly believes the "horns of a dilemma" violates the military principle of objective, which in Canadian doctrine is expressed in the first principle of war: "Selection and maintenance of the aim."

In Sherman's quintessential case, the aim of his march through Georgia to the sea, and from Savannah north through the Carolinas to join Grant at Petersburg, was to destroy in the southerners of those states the will to continue the fight, as well as the means of doing so. Whether he took one city or another on his route of march was secondary to his main objective; but the choice of which city to defend placed his enemy, deprived of the initiative, on the "horns of a dilemma," and Sherman knowingly chose a route of march that obliged his weaker enemy to defend in strength in one place or another, but not both.

Dr. Whaley is right in saying the operation of the "horns of a dilemma" aids in the gaining of surprise, and he is right to say that deception can aid in fooling an enemy on the horns. He is wrong, however, to say that taking a fruitful line of operation is in itself a stratagem, and active deception is necessary to cause an operation like Sherman's to be successful. Dr. Whaley's error flows necessarily from his proposition that, in cases of surprising success or unexpectedly large success, one should look for deception.

As a final comment on theory, Clausewitz would probably say that Whaley overstates the value of surprise in the gaining of success, and underestimates the cost of stratagem.[1]

Dr. Whaley employs the method of case study. The weakness of this method is twofold. When stratagem (i.e. surprise) is but one cause of success, the value of stratagem to the success needs to be weighed properly against the other causes, and the weighing of causes in his 110 case studies the author does not do. He simply assumes the unexpectedness or the unusual greatness of success was due to surprise, and surprise by assumption is caused by stratagem.

Second, when analyzing a particular case, the author must accurately present the correct and relevant information. This isn't always possible when the author is overwhelmed with so many cases, and in the examples of Vimy Ridge (case B11), MICHAEL (case A7), Case Yellow, the German invasion of France (case A20); and Barbarossa (case A28, and the subject of another book by the author) the author plainly assigns the wrong causes to the attainment of success.

The author takes no account of the extensive preparations Canadians undertook to make Vimy a success; but even if one includes friendly security and the surprise of a fresh approach within the meaning of stratagem, the author still failed to elaborate any details of the fresh approach that caused the Canadian success, and why that approach was fresh.

MICHAEL was the German attack on the western front that commenced March 21, 1918. Dr. Whaley completely misunderstands what Hutier tactics are. Whaley describes them as artillery tactics that include a rolling barrage when they were the tactics of infiltration.

Manstein's plan for the invasion of France relied both upon a shrewd estimate of the probable actions of the allies, but also upon a superior application of the principles of concentration of force and speed, as well as a general's eye for the critical point. Manstein's plan did not rely for success upon a stratagem, unless one counts the invasion of the Netherlands, as well as Belgium in apparent imitation of the Schlieffen Plan as a stratagem. Blitzkrieg is not a stratagem.

The German deception operation for Barbarossa, the German invasion of Russia in 1941, is the subject of a separate book by the author, and is only given the briefest mention in the case study section. In his history of the Second World War, Winston S. Churchill relates that he gave Stalin a direct warning of Hitler's intension and the evidence that supported it. Soviet intelligence also warned Stalin of German

preparations. However, Stalin, in complete control of Soviet society, steadfastly refused to believe Hitler would attack him, and undertook no measures to prepare lest they be detected by the Germans who would take them as provocation. Whatever stratagems Germany used to cover Barbarossa, it seems hard to account Germany's surprise and initial success to them when Stalin was in such a state of denial.

None of these criticisms are intended to detract from the general idea promulgated in the book, namely that important military operations ought to be covered by deliberate, active deception; and to note that it is risky to rely entirely on surprise and deception for the success of an important operation. Stratagem, when effective, reduces friendly casualties, and by amplifying success, increases enemy casualties. Denying the enemy information, and even deliberately misleading him, prevents him from taking the measures that blunt friendly effort. But this proposition is only common sense. *Stratagem* is a book thick with theory, argumentation, and over a hundred case studies to put illustrate the commonsensical and to sustain it. Whaley would argue that a work of this weight is necessary because there is plenty of historical evidence to show that common sense is not all that common at the highest levels of command.

Stratagem is intended for an academic audience, some of whom may be involved at a national strategic level in preparing stratagem and penetrating enemy deception. A deception cookbook or a few well elucidated case studies might be more useful to those who aspire to command an army. Stratagem may be underutilized perhaps because active deception is not inculcated at the tactical level and that, by the time officers reach the high strategic level, they possess no habit of thought to include deception in their plans.

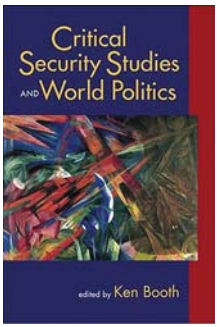
Endnote

1. Carl von Clausewitz *On War* H-P translation, Everyman's Press, 1987. CF Book 3 Ch 9 & 10 and Book 7 Ch 20.

CRITICAL SECURITY STUDIES AND WORLD POLITICS

BOOTH, Ken, ed. Boulder, CO: Lynne Rienner Publishers, 2005 ISBN 1-55587-826-1, 323 pages.

Reviewed by Mrs. Heather Hrychuk



Critical Security Studies (CCS) is a recently emerging issue-area of study that re-conceptualizes what "security" is, while empirically investigating if traditional security-enhancing endeavours are adequate. First conceived in the 1990s, it challenges realist assumptions of security studies by placing human beings, rather than the state, at the centre of security concerns.

The collection's editor, Ken Booth, has long been a proponent of this area of study, contributing to the genre's seminal work.[1] In the introduction he outlines the work's aim as being, "to offer students of security a deeper perspective than is currently available in orthodox security studies."[2]

The initial chapters provide an introduction to the main features of critical security studies. Primary of these is that individuals, not states, are the centre of security analysis. This is coupled with arguments that political realism fails to offer a satisfactory theory or practice of security, and that systems of security based upon the insecurity of others are feasible only in the short term, and not maintainable over long periods. Given

these arguments, the authors urge creating a new form of political organization, one that would rely upon dialogue over strategic action, and suggest that the concept of emancipation as a way forward for greater security.

The following chapters place significant emphasis upon the analysis of individuals. This is accomplished through a variety of case studies, which demonstrate the applicability of CSS to a variety of subjects as disparate as international political economy, peacekeeping, and the conflict in Northern Ireland. Due to their empirical and less ideological nature, these chapters are easily digestible, and in many ways are better suited to inform the reader of the exact nature of the CCS field and how this body of knowledge can be employed as an analytical tool.

The concluding chapter is a puzzling end, as Booth moves from the initial discussion of CCS as *a body of critical knowledge* to it being a *specific critical theory of security*. Instead of using this chapter to summarize what CCS offers that is lacking in orthodox security studies, Booth largely devotes his final words to detailing which subsections of critical security studies should be included in the field. Various approaches to security are outlined as useful while others are dismissed. In doing so, focus is drawn away from the utility of CCS, and instead, directs the reader to a myriad of theories and schools of thought with varying degrees of importance. Further, given that some preceding chapters base analyses upon schools of thought subsequently dismissed by Booth, some ambiguity remains regarding what CCS is actually composed of. Readers could emerge with a much better understanding of this field if this discussion occurred earlier in the work, and the conclusion was reserved for articulating how CCS provides the deeper perspective that Booth initially states.

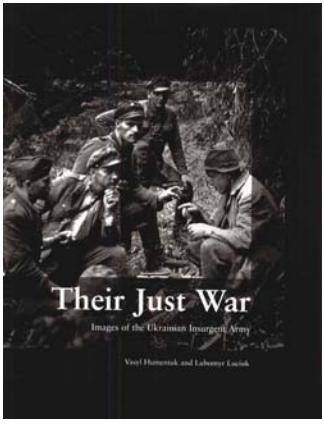
Endnotes

1. See: Keith Krause and Michael Williams, *Critical Security Studies: Concepts and Cases* (Minneapolis: University of Minnesota Press, 1997).
2. Ken Booth, ed. *Critical Security Studies and World Politics* (Boulder CO, and London: Lynne Rieneer Publishers, 2005) 1.

THEIR JUST WAR—IMAGES OF THE UKRAINIAN INSURGENT ARMY

HUMENIUK, Vasyl and LUCIUK, Lubomyr. The Kashtan Press, 2007,90 pages.

Reviewed by Colonel R.S. Williams, MSM, CD



Little known to the non-Ukrainian speaker in the West or even partially understood is the History of the Ukrainian Insurgent Army or Ukrainska Povstanska Armiya (UPA). The UPA is often confused with the Ukrainian Division "Galicia" or seen to be the same. If only history were that simple. During the era of the Soviet Union, official history probably preferred this lack of knowledge or labelling of the UPA and the Galician division collectively as Fascists, collaborators or many other less polite terms, only adding to the confusion.

In an attempt to set the record straight, suffice it to say the UPA was formed as an independent force from the Germans, ready to side with the West against the Soviet Union. Until the collapse of the Nazi regime and the

cessation of hostilities in May 1945, the UPA had two fronts—Germany and the Soviet Union. Perhaps surprising to many readers would be the fact the UPA continued its struggle in the rural Ukraine until the mid 1950s, a time when the rest of the world's focus was on post-war reconstruction and the Korean War. This subject is deserving of much more research, although source material and survivors are scarce careful investigative work to track down and /or locate these sources would be required.

As indicated in an introductory note to the album, the collapse of the Soviet Union and the independence of Ukraine set in motion a variety of instructions from President Leonid Kuchma to once and for all clarify the role of the Organization of Ukrainian Nationalists and The Ukrainian Insurgent Army. In 2005 the recommendations were accepted.

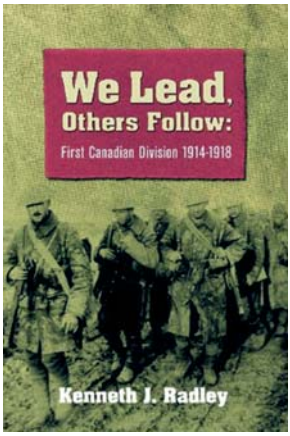
In the meantime, a treasure trove of photographic negatives was unearthed in the remote Western Ukraine. These negatives, when developed, depicted haunting images of brave and proud young patriots who likely knew that their cause was doomed, but continued to fight for independence. Thanks to several survivors, many of the personnel have been identified. Carefully pieced together and included as biographical notes are the fates of these young Ukrainians, most of who did not live to see the realization of their dream.

Thanks to the cooperative work of dedicated Ukrainians on both sides of the Atlantic and visits to the Ukraine by Dr Lubomyr Luciuk, a selection of the images is now available to an English speaking audience. The photographs of Dmytro Bilinchuk (pseudonym KHMARA—Cloud) and his compatriots will most certainly make any reader wonder what kind of person he was and how deeply he was dedicated to the cause of independence for which he eventually gave his young life.

I highly recommend this book to anyone interested in partisan warfare and the little known history of the post World War II Insurgency movement in the Ukraine. Professor Luciuk's introduction is a comprehensive yet understandable snapshot of the origins of the UPA for the reader unfamiliar with the topic. This book's haunting images will leave an impression on any reader and provide many questions for further research, academic or personal.

WE LEAD, OTHERS FOLLOW: FIRST CANADIAN DIVISION, 1914-1918

RADLEY, Kenneth, Vanwell Publishers, St. Catherines, 2006, 414 pages.



Reviewed by Major Andrew B. Godefroy, CD, Ph.D.

After many decades of drought, scholarship on the Canadian Army in the First World War is appearing with increasing regularity as more and more interested historians enter the field. In addition to populist writers such as Ted Barris and Tim Cook, professional historians such as Andrew Iarocci and Patrick Brennan have made contributions of substance to the rapidly expanding body of literature. In, *We Lead, Others Follow: First Canadian Division, 1914-1918*, Kenneth Radley joins this growing community of Great War historians with a very detailed and original examination of Canada's venerable 'Old Red Patch' on the western front.

At first glance, however, Radley's caveats and the choice of content for his study of the 1st Canadian Division may appear uninviting to some. Far from being a comprehensive

narrative or examination of the formation, the author has instead chosen to focus his work on three specific subjects—command and control, the staff, and the division's training, and has further tuned his efforts to examine primarily the effect of these developments on the infantry. The author devotes two chapters each to these three subjects. Hebookends his analysis with a description of the formation and an assessment of its combat effectiveness during the last hundred days of the war. While he makes some acknowledgement of the roles of other branches such as the artillery and engineers, he is a little too quick to dismiss their importance in his infantry-centric assessment of the formation and this affects some of the author's conclusions.

Radley cautions the reader, "… this book is not a history of the war, the BEF, the CEF, or the 1st Division's entire career. Nor does it analyze the 1st as a social institution, this being of far less importance than the professional attributes that made the division a good one: command, control, staff work and training of and by the division. The focus here is the infantry. The artillery will receive its just due, as will the engineers, but much less attention is paid to functions such as transport, supply, and medical support. The cavalry is not a part of this study, and tanks are discussed only briefly in reference to command and control and training." Though the author's choices are hardly surprising (Radley spent over three decades as an infantry officer and is a graduate of the Canadian Land Forces Command and Staff College), with so much absent from the analysis one cannot help but openly question the value of his conclusions. Yet Radley has done an exceptional job of presenting his focused investigation, and has employed a tremendous amount of new primary source research to support his argument.

This book is, quite simply, a meaty read for students and scholars of the Canadian Expeditionary Force (CEF). Radley's command of the primary source material is impressive, and his endnotes alone make the book worthwhile. He has, above all else, radically reshaped the nature of assessment of an infantry divisions' evolution and has in this reviewer's opinion accomplished what all authors hope to accomplish—the creation of a book which cannot be subsequently ignored in future historical analyses of this subject. Radley is perhaps the first Canadian Great War historian to dissect in detail the evolution of not just CEF doctrine and tactics, but also how these guides were transformed into training, and after, orders for operations. He spends a considerable amount of the book explaining in detail the evolution of staff duties and orders preparation, as well as preparatory training for battle. It makes not only for interesting reading, but also reshapes our understanding of what soldiers did when they were not actively engaged in combat operations. His analysis of the relationship between training and operations far exceeds earlier works by other Canadian military historians, and Radley has set a new standard for what must be considered in the analysis of such issues.

The language of the book clearly reflects Radley's own infantry experiences, as well as his familiarity with the teachings of the Canadian Land Force Command and Staff College (CLFCSC). For students currently attending the Army Operations Course (AOC) or Joint Command and Staff Program (JCSP), chapters five and six of the book examining staff duties and orders evolution may be particularly relevant and of interest. There are few weaknesses in the book, but they do tend to stand out. The active diminution of the other combat arms results in the dangerous conclusion by Radley that the infantry alone was the cause of the repeated success of the Canadian Corps, when even his own analysis demonstrates that it was the synchronization of combat power that led to this success. The other major complaint is the constant idolization of the British officer cadre within the Canadian Corps chain of command. Radley pours too many laurels at their feet, when British historians such as Simon Robbins and others have already demonstrated the restrained effectiveness of British Army staff officer qualifications prior to 1914. Suffice to say, Radley's analysis would have made more sense had he referred to this influence in terms of 'interoperability' rather than 'professionalization' of the Canadians. After all, the British Expeditionary Force (BEF)

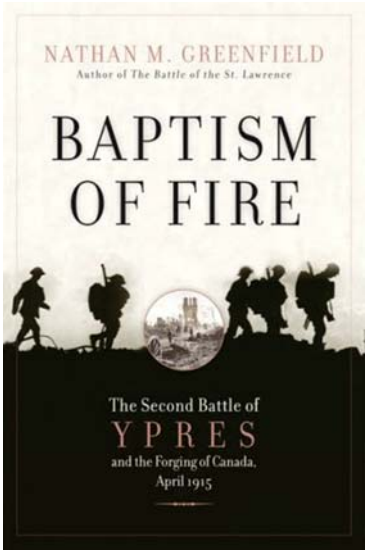
had never fought division and corps level battles against the Imperial German Army before 1914 either. Everyone was learning at the same time.

Finally, as one who briefly wore the 'Red Patch', this reviewer was very pleased to see the arrival of a history focused on this formation. With further studies of the 1st Canadian Division forthcoming by Radley, Iarocci, and others, there is little question that this subject will be well covered in the near future. Kenneth Radley, true to the title of his work, has led the way with this capstone volume, and it is strongly recommended for those interested in this period.

BAPTISM OF FIRE: THE SECOND BATTLE OF YPRES AND THE FORGING OF CANADA, APRIL, 1915

GREENFIELD, Nathan M., Harper Collins Publishers Ltd, Toronto, 2007,
474 pages. $34.95 CAN

Reveiwed by 2Lt. Thomas Fitzgerald, M.A., LL.B.



In popular Canadian lore, the battle for Vimy Ridge on Easter Monday, 1917 is viewed as the day Canada came of age, when Canada passed from Dominion to nation.[1] On April 9th of that year, through sleet and snow, and after weeks of intensive preparation, soldiers of the 1st Canadian Corps (fighting as one together for the first time), commanded by Lieutenant-General Julien Byng[2], climbed out of their trenches and moved up the ridge and by noon had cleared the majority of the ridge. Ninety years later, Vimy is held up—rightly so—as the epitome of Canadian soldiering.[3]

What is often overlooked, perhaps, because offensive action is more glamorous than defensive, is the heroic stand made by the battalions of the First Canadian Division at the second Battle of Ypres for three days in April, 1915, meticulously and movingly detailed in Nathan M. Greenfield's *Baptism of Fire*.

By the spring of 1915, the war had stalemated into a line of trenches from the English Channel to Switzerland. Gains were measured in yards often won at appalling costs. The First Canadian Division now fully organized, marched into the Ypres salient and took over positions from the French Army. The Canadians were to hold the northern side of the salient with an Algerian division on its left and a British division on its right. The Ypres salient was Belgian territory and with the Belgian Army now fighting on the Allied side, it could not be relinquished for political and military reasons (if the salient was cut off, the Algerian, Canadian and two British divisions would be destroyed). This piece of shell ploughed ground would have to be held.

The battle commenced on April 22nd with the release of clouds of chlorine gas on the positions held by the 45th Algerian Division.[4] The Algerians broke and ran, leaving a four mile gap on the Canadian left. *Baptism by Fire* is the story of the common Canadian soldier and how, often fighting in sections and in platoons, he gradually withdrew, and in good order, held off successive German attacks until the line was stabilized and disaster averted.

Baptism by Fire is not only a story of individual acts of courage[5] but the story of personalities and how they affected the battle: Brigadier-General Currie's "show-down"

with Major-General Thomas Snow (Commanding Officer of the 24th Division), at the latter's Command Post on April 24th; of how, at times, communications fail through the "fog of war" [6]; how the chivalry and humanism of the previous summer and fall had given way to savage, no quarter given, fighting[7]; and finally, how the agonies of Kitcheners' Wood, Mauser Ridge, St. Julien, the Apex, Mouse Trap Farm and Gravenstafel Ridge are as important to Canadian military history and the birth of Canada as other, better known events.

The author paints a vivid, hour by hour, almost minute by minute portrait of the battle. Relying on official histories—Canadian, British, German and secondary sources, the author provides an absorbing and moving account of the first four days of the battle. The writer makes you feel that you are "standing to" awaiting the next onslaught while a barrage of "Jack Johnsons"[8] roars overhead. This is military writing at its finest. Maps are well paced and relevant, the index comprehensive.

Baptism of Fire is highly recommended to the serious student of Canadian military history. Greenfield clearly demonstrates that while Canada, as a nation, was forged on Vimy Ridge, it started on the road to nationhood in the furnace that was Ypres.

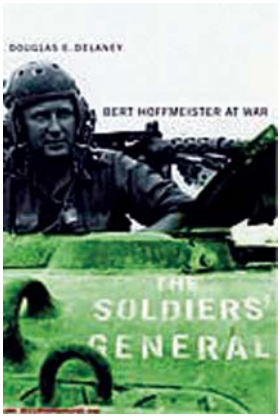
Endnotes

1. Pierre Berton, *Vimy*, Toronto: McClelland and Stewart (1896); Ted Barris, *Victory at Vimy*, Toronto: Thomas Aiken Publishers (2007); John Swettenham, *To Seize the Victory*, Toronto: the Ryerson Press (1965)
2. Later, Viscount Byng of Vimy, Governor-General of Canada
3. This was the third time the ridge had been attacked by the Allies. In May, 1915 the French Army attacked Vimy Ridge, almost reaching the crest, only to be beaten off by German reserves. In May, 1916, those parts of the ridge won by the French were lost by the British: Swettenham, op.cit. pp. 93-98.
4. Contrary to popular belief, this was not the first time poison gas had been used by the German Army. In October, 1914 at Neuve Chapelle, and in October, 1915 in Poland, gas was used, in the opinion of the German High Command, with disappointing results. Swettenham, op.cit. pp. 79.
5. Four Victorian Crosses were awarded during the battle: L/C Pl. F. Fisher (13th Battalion); Sergeant Mayor Hall (8th Battalion); Lt. D.E. Bellow (7th Battalion); Captain F.A.C. Scrimger, M.D. (14th Battalion), the first two awarded posthumously.
6. The author details the incredible decision by Brigadier Richard Turner (3rd Brigade) to withdraw the 2nd and 3rd Battalions to the "GHQ line", i.e. away from the front rather than, as ordered, to reinforce the troops fighting there.
7. Greenfield writes of several *ruses de guerre* where enemy soldiers dressed as French or British soldiers to infiltrate the lines; the shooting of clearly marked medical personnel, and the shooting after the white flag had been raised (on both sides).
8. 15 cm artillery shells named for the first African-American heavy weight champion. Greenfield, op.cit. pp. 47-48.

THE SOLDIERS' GENERAL: BERT HOFFMEISTER AT WAR

DELANEY, Douglas E. UBC Press, Vancouver, 2005, 299 pages. $85.00 CAN

Reviewed by Ms. Christine Leppard



Canadian historians have a long and proud tradition of writing political biographies. From Macdonald to Trudeau, biographers have imparted an intimate understanding of what Canada's political leaders thought, how they led, and even what they drank. The same cannot be said, however, of Canada's military leaders. Field commanders, especially of the Second World War, are essentially historical Missing in Actions (MIAs). This is a sad state indeed, because it was the division, brigade and battalion commanders who made crucial operational and tactical decisions. Unfortunately, their leadership styles, ability to harness technology, lead operations, make on the spot decisions, learn lessons of battle, and inspire their men are largely understudied and underappreciated.

Lieutenant-Colonel Douglas Delaney, Ph.D., has taken an important step towards filling this gap by assessing Major-General Bert Hoffmeister, who was arguably Canada's most proficient Second World War field commander. In *The Soldiers' General: Bert Hoffmeister at War*, Delaney, an associate professor at Royal Military College, examines Hoffmeister's leadership, seeking to understand how this militiaman learned to be the effective commander that he was.

A commendable introductory chapter sets the groundwork for his analysis: command, Delaney argues, is a complex of interdependent "human and tactical dimensions."[1] By chronologically tracing the development of Hoffmeister's leadership style from his pre-war career to the end of the war, Delaney demonstrates that Hoffmeister exhibited these traits. As it unfolds, Hoffmeister's story reminds us of the talented militiamen who commanded the Canadian Expeditionary Force during the First World War. A lumber yard manager and militia officer with the Seaforth Highlanders when war broke out, Hoffmeister's wartime career proved to be far more illustrious than those of his contemporaries, even though many had been pre-war professional soldiers. By the time the Seaforth's landed in Sicily with 1st Canadian Infantry Division in July 1943, Hoffmeister was the battalion commander. Quickly showing his mettle through Sicily's peaks and valleys, he was given command of the 2nd Canadian Infantry Brigade on September 29, 1943. In Italy, he led the brigade capably during the bloody battle for "little Stalingrad"—Ortona, December 1943. Hoffmeister's ability was evident to High Command, and he was given the 5th Canadian Armoured Division in January 1944, which he led proficiently in Italy and Northwestern Europe until the end of the war.

Delaney argues the key to Hoffmeister's successes on the battlefield were two fold. First, he was a hardworking and intelligent businessman, who had learned during his civilian career that success was achieved by mastering the mechanics of the trade—in this case, war. The learning curve was steep and stressful, landing him in a military hospital with a nervous breakdown in 1941. Yet through diligent study and experience, driven in part by his natural inquisitiveness and hard driving nature, Hoffmeister learned how to conduct effective training exercises, and organize and execute fluid battle plans.

Secondly, Hoffmeister's charisma, courage and collaborative command style bred in his men loyalty, innovation, cohesion and a steadfast determination to win. While partially attributable to his affable nature, Hoffmeister endeavoured to lead by example. He was attuned to his subordinates in a way that none of his superiors, Generals Guy Simonds, Harry Crerar, or E.L.M Burns, could match. He was always at the business end when the firing started. Victory followed victory and, not surprisingly, promotion followed rapidly. Hoffmeister rose from company command to division command in a mere eleven months.

Delaney's analysis of Hoffmeister is rooted in a firm theoretical understanding of leadership, based on his own experience as an infantry officer in the Canadian Forces. His research is exhaustive, and his interviews with Hoffmeister's subordinates are particularly enlightening. They illustrate Hoffmeister's intangible leadership qualities in ways that are unattainable using war diaries, memos, or battlefield correspondences. Indeed, Hoffmeister's use of a subordinate's nickname during a tense moment could have been more important to maintaining unit cohesion than his battlefield tactics, contends Delaney.

Diligent research is complemented by Delaney's acute understanding of Italian Campaign operations, his infantryman's eye for terrain, maps and charts, and concise contextualization of Canadian operations in Allied strategy. Consequently, Delaney's research is more than a commentary on leadership, but also a much-needed contribution to the Italian Campaign historiography in general. To many Canadian military historians, the "D-Day Dodgers" have been but a sideshow to the Normandy Campaign, just like during the war. The few studies on Italy have criticized the Canadians' use of fire and

movement operational doctrine, assessed the value of attacking Ortona, and investigated the rivalry between E.L.M. Burns and British Commander Sir Oliver Leese.[2] Delaney weighs in on these issues, giving Hoffmeister's views, but his analysis goes one step further. He details how Hoffmeister adapted and applied Canadian doctrine to his armoured division, which was fighting in the inhospitable Italian terrain.

In this way, Delaney furthers our understanding of the Canadians' learning curve during the Second World War; a framework that until recently was the sole purview of Arthur Currie and the Canadian Corps. For example, Delaney shows the reader it was in Sicily where Hoffmeister learned the necessity of fluidly integrating infantry and armour. His Seaforth Highlanders launched an integrated "striking force" assault across the Salso River. The speed of the attack was ultimately successful in chasing the Germans from their positions. In later months, Hoffmeister conducted training exercises that embedded these lessons. He then utilized "striking force" formations in the Liri Valley when in command of the 5th Canadian Armoured Division. By detailing the developments of Hoffmeister's combined arms attack doctrine, Delaney demonstrates how the Canadians were learning lessons and modifying operations to overcome the skilfully emplaced German defenders, who used Italy's rugged terrain to the maximum advantage. Delaney thus points the way for future historical research, even if by implication: doctrinal learning as a joint, multiunit, and even multinational occurrence in the Italian theatre.

Douglas Delaney's ability to make military operations accessible to those not well versed in military jargon, has made *The Soldiers' General* a necessary and enjoyable read for anyone interested in Canadian military leadership and the Italian Campaign. It is also a must read for anyone studying the nature of command in Canada's citizen soldier army. With a fluid pen and articulate research, Delaney without a doubt achieves his objectives of analyzing Hoffmeister's command, and perhaps more importantly, telling the remarkable story of one of Canada's finest generals.

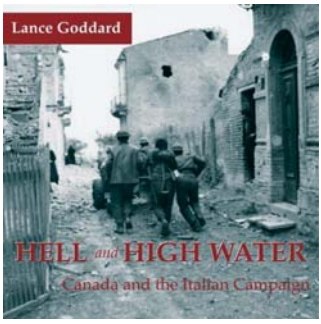
Endnotes

1. Douglas Delaney, *The Soldiers' General: Bert Hoffmeister at War* (Vancouver: UBC Press, 2005), 5.
2. See William McAndrew, "Fire or Movement?: Canadian Tactical Doctrine, Sicily—1943." *Military Affairs* 5:3 (July 1987): 140-145; Lee Windsor, "'Boforce': 1st Canadian Infantry Division Operations in Support of the Salerno Bridgehead, Italy, 1943" *Canadian Military History* 4:2 (Autumn 1995): 51-60; Brereton Greenhous, "Would it Not Have Been Better to Bypass Ortona Complete…?" *Canadian Defence Quarterly* 18:5 (1989): 51-55; J.L. Granatstein, *The Generals: The Canadian Army's Senior Commanders in the Second World War*, (Toronto: Stoddart, 1993).

HELL & HIGH WATER: CANADA AND THE ITALIAN CAMPAIGN.

GODDARD, Lance. Dundurn, Toronto, 2007, 280 pages. $29.99 CAD.

Reviewed by Neil Chuka



Those reading this journal are likely all too aware of the fact that the study and understanding of Canadian history by Canadians is relatively weak. Popular books by Jack Granatstein and polling by the Dominion Institute are two reputable sources supporting the notion that Canadians are not very aware of their history in general and military history in particular. The question then is how to motivate average Canadians to take an interest in their heritage?

A book such as Lance Goddard's *Hell & High Water* is one way. The third in a series about Canada's military

contribution to the Second World War, this book is easy to read, generously illustrated with photographs, and makes heavy use of personal vignettes from a small number of participants in the Italian campaign. This is not an academic book, as the limited breadth of interviews and abbreviated reference section demonstrates; but therein lies part of its value. Read by the average person, this book can convey an understanding of the Italian campaign, at least from a Canadian perspective. The book describes the daunting environmental, geographical, physical, and psychological challenges that faced Canadians as Allied forces slowly made their way north, from Sicily to the Po. Most importantly, Goddard, a television producer, has helped create documentaries to accompany his previous two volumes. If he does the same with *Hell & High Water*, he will engage Canadians in a medium, unfortunately, more popular than the printed word.

Beyond being a useful tool to help get Canadians interested in history one can ask, is the book a legitimate historical work? The answer is absolutely. Although most of the vignettes are less than objective, and the experiences of at least one, Colonel (ret'd) Sydney Frost, are published in depth elsewhere, there is value in recording the personal opinions and recollections of participants in the events being described. Narrative history is an important component of the study of history, an argument lately made by, among others, Mark Zuelke. Military history, in the end, is about people. Objectivity aside, the recollections of participants helps provide context to events and can allow readers insight into things such as motivations, perceptions, emotions, and personal details that may otherwise escape preservation in the historical record. In essence, narrative history helps put a human face on the story, one of the reasons why works by such Canadian icons as Farley Mowat and Pierre Berton have proven so popular and enduring.

There are only a few faults to *Hell & High Water*. It would be nice to see more and better maps. Also, there is almost no mention of the Royal Canadian Air Force (RCAF) or Canadians serving in allied air forces in the theatre, and limited discussion of Canadian naval activities in support of the campaign. Regardless, the book serves its purpose of briefly recounting a "forgotten" campaign in a readable, understandable manner. If it piques a greater interest in history in even a few people, its value will far outshine the purchase price.

MERCHANT OF DEATH: MONEY, GUNS, PLANES AND THE MAN WHO MAKES WAR POSSIBLE

FARAH, Douglas, and BRAUN, Stephen. John Wiley and Sons Inc, Hoboken, NJ, 2007, 308 pages

Reviewed by Sean M. Maloney, Ph.D.

If you've served with the Canadian Forces in Africa, the Balkans, or the Middle East, chances are you've flown through airfields and seen numerous white former Soviet Air Force Ilyushin 76 transport aircraft, on the ramp loading, taking off, or landing. Chances are there were weapons, helicopters and equipment aboard those aircraft categorized as "spare parts." Chances are you saw aircraft belonging to Victor Bout, the Milo Minderbinder of our generation. Like that memorable *Catch-22* character, "Victor B" is adept at profiting from two or more antagonists more or less simultaneously, to stunning effect.

Farah and Braun have assembled a fascinating account of Victor Bout (pronounced 'Boot') and his shadowy activities based on interviews with intelligence and diplomatic

personnel and from the records of observers obsessed with the coming and goings of Air Cess, Air Bas, Flying Dolphin, Transavia, and a myriad of other front companies and their connections.

Victor Bout, a former alleged GRU agent, branched out after the collapse of the Soviet Union. Building on Cold War contacts established by the Soviets in the 1970's and 1980's to supply arms to the so called National Liberation Movements in the Third World, Bout and company(ies) essentially privatized the system to profit from keeping the former Soviet allies in guns and ammo with tidy profits reaped in the form of diamonds, gems, and cold hard cash. One of the more astounding parts of the book describes Bout's involvement in encouraging and then supporting a rebel movement seizing a diamond rich area in Africa so other partners could extract the minerals without interference.

Canadian observers of the Afghanistan scene will be intrigued with Farah and Braun's account of how Victor Bout supported the forces of Ahmad Shah Massoud, Rashid Dostum, and the Taliban, all at the same time. It is evident that Bout's Ilyushins and Antonovs were delivering ammunition and weapons to the factions and exporting opium on the return trips. Bout's support to Al Qaeda in the pre 9/11 days is equally interesting as is the discussion of how the Taliban used Ariana airlines for their covert purposes with Bout's assistance. Did Bin Laden escape on a Victor Bout controlled aircraft? Indeed, the link between Albanian weapons stores and the war in Afghanistan will be new to most readers.

The most disturbing portions of the book deal with the use of Bout aircraft to deliver massive quantities of weapons to extremely violent factions in Sierra Leone, Liberia, Zaire/Congo and as is alleged, Rwanda. The general public forgets that the Soviet designed and exported AK47 assault rifle and subsequent designs are responsible for far more deaths in the Third World than the dead of Hiroshima and Nagasaki combined. *Merchant of Death* explains how Bout and his people provided an uninterrupted pipeline of Kalashnikovs and ammunition from former Soviet bloc countries to whoever could pay throughout Africa.

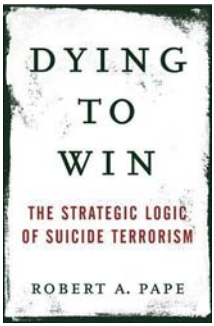
The paradox of a man like Bout is that he controls a majority of what are fewer and fewer commercial heavy lift aircraft, making him, and his companies, valuable resources for countries that wanted to save money and bought into Alternative Source Delivery military logistics systems in the 1990s. Has the moral cost been worth not spending money on nationally controlled fleets of heavy lift transports rather than resorting to men like Bout? What price is sovereignty?

Farah and Braun have provided us with a window into a world which otherwise remains opaque. A world relying on a man, who by all appearances is a late 20th Century reincarnation of Basil Zaharoff. Despite its cliché'd title, *Merchant of Death* is well worth reading and thinking about.

DYING TO WIN: THE STRATEGIC LOGIC OF SUICIDE TERRORISM, 2ND EDITION

PAPE, Robert A., New York: Random House Trade Paperback Edition, 2006 ISBN 0-8129-7338-0, 334 pages.

Reviewed by Major James McKay, CD, Ph.D.



This is the second edition of this book; the main difference between the two is the inclusion of data from the Iraqi Civil War, 2003-2005. In many ways, the book comes across as a conceptual descendant of the author's major work from the 1990s, *Bombing to Win*. During that decade, one of the major streams of thought in political science pertaining to armed conflict was the phenomenon of coercion, and *Bombing to Win* was one of the seminal texts. Since then, the major streams have changed in pursuit of policy relevance. After endless articles on Islamic radicalism came a torrent of articles and books on how to wage counter-insurgency operations.

Robert Pape is no stranger to criticism and he has engaged in a series of debates with his critics in the pages of several journals.[1] *Dying to Win* has also attracted similar criticisms from other authors, and other reviewers have not always been kind. Their criticism, however, displayed a similar pattern to that of others; the author's use of evidence has always benefitted his argument.

One should not dismiss this book out of hand based upon others' comments about the use of evidence. It is the book to read for budding authors of political science papers and theses. Pape uses his argument very skilfully to provide a structure to the book. He notes that suicide terrorism operates with three different logics, these being strategic, social and individual. Suicide terror, according to Pape, works well at achieving political outcomes through the coercive power of "punishment." This is a weakness of the book; it assumes people have read either *Bombing to Win* or some of the articles derived from that book that discuss the strategies of coercion.[2] Those that have not read the book may miss some of Pape's points due to the frequency of value-laden terms. In terms of social logic, it tends to enjoy mass support from the surrounding societies, and the individuals that carry out those acts believe that they are acting out of altruism.

In *Dying to Win*, Pape argues that there are patterns within the practice of suicide terrorism. These are:

- Timing—the use of suicide terror in an organized campaign.
- Target selection—the use of suicide terror against democracies.
- Nationalist goals—the use of suicide terror in pursuit of national self-determination.

These patterns were induced from 315 different incidents where suicide terror was employed from 1980 through to 2003. It does not include evidence from Afghanistan. Only one of the arguments about the patterns is valid. The evidence corroborates Pape's claim about the use of organized campaigns. This is logical, as the "systems" required to recruit and indoctrinate suicide bombers, to equip them, and plan and organize their actions, takes time, consideration and effort to develop.

The other two patterns are much weaker and the selection of evidence comes into question. This definition accepts any action undertaken to rid an area of another power's forces. Pape does not distinguish between acts of suicide terror against the military

forces of an occupying power and the body politic of the occupying power. Thus, acts of terror within Israel by opposing groups become the equivalent of acts of terror against Israeli forces engaged in an occupation of Lebanon; the same occurs for the Khobar Towers bombing in 1996 and on 9/11. This argument plays into the hands of isolationists who believe that the best way to achieve security is to withdraw militarily and politically into would-be fortresses, and indeed the afterword contains a call for "offshore engagement." This argument relates to the weakness inherent in the national self-determination argument. Given that one third of the campaigns in the data set pertains to Islamic groups operating against Israel on Israeli territory, and therefore, national self-determination for one set of parties to the conflict would likely result in national destruction for the other party, this casts doubts on the utility of this argument. The other twelve cases, however, support Pape's argument about national self-determination.

Arguments rest on an evidentiary foundation. Social phenomena do not always allow for easy classification of evidence. Authors risk criticisms either for a weak argument or for the selective use of evidence so that the argument appears stronger. Pape might be guilty of the latter based upon his use of evidence. *Dying to Win* is a fantastic example of how to structure a political science book.

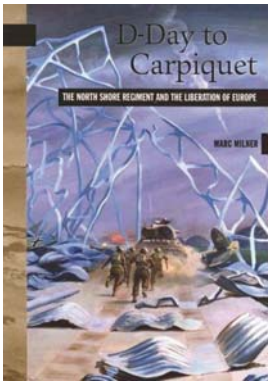
Endnotes

1. For examples, see: Patrick C. Bratton, "A Coherent Theory of Coercion? The Writings of Robert Pape," *Comparative Strategy* Vol. 22, No. 3 (October-November 2003): 355-373; Karl Mueller, "Strategies of Coercion: Denial, Punishment and the Future of Air Power," *Security Studies* Vol. 7, No. 3 (Spring 1998): 182-228; Robert Pape, "The Air Force Strikes Back: A Reply to Barry Watts and John Warden," *Security Studies* Vol. 7, No. 2 (Winter 1997/1998): 191-214; Robert Pape, "The Limits of Precision-guided Air Power," *Security Studies* Vol. 7, No. 2 (Winter 1997/1998): 93-114; Colonel John Warden, USAF, "Success in Modern War: A Response to Robert Pape's 'Bombing to Win,'" *Security Studies* Vol. 7, No. 2 (Winter 1997/1998): 172-190; and Barry Watts, "Ignoring Reality: Problems of Theory and Evidence," *Security Studies* Vol. 7, No. 2 (Winter 1997-1998): 115-171.
2. For example, see: Robert Pape, "Coercion and Military Strategy: Why Denial Works and Punishment Doesn't," *The Journal of Strategic Studies* Vol. 15, No. 4 (September 1992): 423-475.

D-DAY TO CARPIQUET: THE NORTH SHORE REGIMENT AND THE LIBERATION OF EUROPE

MILNER, Marc, Goose Lane Editions, 2007, 138 pages. The New Brunswick Heritage Series Volume 9

Reviewed by Colonel R.S. Williams, MSM, CD



Given that relatively little is known about the war record of the many young New Brunswickers who took part in the Second World War, this compact book is filling a gap and provides possible avenues for further research. Marc Milner has provided us with a very readable (you won't want to put it down) account of the North Shore Regiment's (NSR) fighting up and to their participation in OPERATION WINDSOR in the French village of Carpiquet in July 1944. Milner blends eyewitness accounts from his interviewing of veterans and research of war diaries and sources in a fashion that renders the narrative exciting and not at all either too complex or too dry for the non-military or military history novice.

This book is particularly timely given the dwindling number of surviving Canadian veterans who took part in the Second World War and the account of the NSR's participation in this battle in particular. This compact volume provides

ample information for the amateur historian, genealogist and professional historian alike, not becoming bogged down in too many details but certainly able to peak interest in further research. The selected bibliography offers the inspired reader a number of excellent starting references to begin their own research.

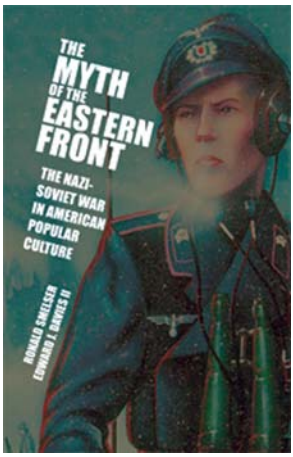
Milner's description of the loss of the Great War veteran, A Company Commander, John A. McNaughton is one of the many poignant episodes brought to us thanks to eyewitness survivor accounts. The reader is provided with an insight as to what the loss of a senior and highly regarded family member means within the Regimental family.

I highly recommend this book to any and all interested in the experiences of a Canadian Infantry Regiment that fought overseas over sixty years ago and was severely bloodied in a battle that has not previously been given the critical examination that is its due. The NSR did their job against a very determined and well experienced German foe. By making an account of the NSR story accessible in a very digestible format, Milner has done his job in making another fascinating chapter of Canadian military history available to the public. The fact that veterans of the fighting were still alive to see his book released this year makes it even more satisfying.

THE MYTH OF THE EASTERN FRONT: THE NAZI-SOVIET WAR IN AMERICAN POPULAR CULTURE

SMELSER, Ronald, and DAVIES II, Edward J. Cambridge University Press, 2008.

Reviewed by Mr. Robert Engen



Ronald Smelser and Edward Davies' *The Myth of the Eastern Front* is a sweeping examination and critique of the historiography, literature, and popular culture surrounding the Second World War on the Soviet front. The authors argue that the reputation of the German Army has been rehabilitated, embellished, and lionized since the beginning of the Cold War, in spite of the catastrophic defeat of the Wehrmacht in battle and, ominously, despite the terrible war crimes its soldiers carried out. A paradigm has emerged in popular culture and in military history culture since 1945 wherein the German military is viewed sympathetically, cleanly separated from the Holocaust and other criminal actions of the Nazi regime. This paradigm, Smelser and Davies posit, is nothing less than a distortion of history, and underscores how popular memory can be manipulated in the service of a political agenda.

Although *The Myth of the Eastern Front* opens with a comparatively weak examination of the portrayal of the Soviet Union in the American popular media during the war, it hits its stride in subsequent chapters that explore the profound influence of high-ranking German POWs in shaping American attitudes in the war's aftermath. German generals, including well known individuals such as Guderian, Manstein, and Halder, ingratiated themselves to their Western captors and avoided substantive punishment despite documented complicity in war crimes, especially the slaughter of prisoners and assistance rendered to the infamous German *Einsatzgruppen* death squads. Within the Cold War framework, the former Nazi military leadership talked, wrote, and networked, peddling an account of their war against the Soviet Union to a highly receptive American audience. Through popular publications and cooperation with

the United States (US) Army's Historical Division in crafting combat studies, German soldiers, even members of the Waffen SS, succeeded in largely divorcing the memory of Germany's military campaigns of the Second World War from the mass murder of the Nazi regime. In the process, they also succeeded in aggrandizing the military's operational and tactical accomplishments and denigrating the performance of the allied armies.

Smelser and Davies go further in exploring the trickle down effects of reversing the historical record. Subsequent chapters examine popular fiction, war games, Internet forums, costumed re-enactors, and counterfactual history, all of which serve to marginalize German war guilt while detailing the minutiae of German military achievements. Rather than being identified with the barbarism of the regime they served, the German soldiers and generals in the east became sympathetic champions of a "Lost Cause" in protecting Europe from Stalinist Russia, portrayed as skilfully persevering in the face of tragic odds. The idea of a "clean" Wehrmacht, tactically brilliant and unblemished by any involvement with the Holocaust, was gradually accepted, and persists in circles of enthusiasts to this day.

While *The Myth of the Eastern Front* presents itself as cultural history, it is likely to be of greatest interest to military historians and analysts. The fetishizing of German fighting prowess has become a staple for many major historical studies of the Second World War, with the German Wehrmacht being regarded as the greatest military organization in modern history. It has become a commonplace argument that the Allies triumphed only through the weight of materiel and manpower they succeeded in assembling; at a tactical and operational level the Germans are frequently viewed as intrinsically superior.[1] These arguments, Smelser and Davies claim, are traceable to the German generals' postwar attempts to exonerate themselves and their army's performance. *The Myth of the Eastern Front* shows how the qualitative superiority of German forces over the Allies—both against the Soviets and in Western Europe—was believed to be a historical "fact" with which, for a time, few historians or military thinkers took serious issue. In reality, this "fact" is largely an historical distortion; numerous studies with an excellent grounding in the documentary evidence have been published in recent years challenging the idea of Allied tactical inferiority.[2] The strength of *The Myth of the Eastern Front* is in how it lays out in well researched detail where the mythos of the German army developed from, and how it came to dominate the historiography. Such an exploration has been conspicuously absent and should be welcomed by military scholars and analysts.

That said, given the importance of its thesis, it is a pity that The Myth of the Eastern Front falls short in some ways. This reviewer noticed a far greater number of editorial mistakes and misspellings than is normal for a scholarly work, and the tone is at times rather colloquial, particularly in the first chapter where incessant reference to the American people as "we" and "us" is perhaps too familiar. One is also left with the sense that the authors' argument is being stretched too thin in the latter chapters with the examination of war games, popular fiction, and re-enactment groups. While the second half of the book examines a litany of popular works exemplifying the Wehrmacht and the Waffen SS across a variety of media, it reads at times like a catalogue of Nazi memorabilia for enthusiasts, somewhat distant and detached from the powerful evidence of the earlier chapters. More synthesis connecting these discussions to the earlier points would have been appreciated. Perhaps this speaks to the reviewer's admitted military bias, but it seems that *The Myth of the Eastern Front* is at its strongest when discussing the historiography, and at its weakest when attempting to document pro-German artefacts in American popular culture.

The paradigm that Smelser and Davies talk about has begun to shift in the discipline of history, with recent scholarship placing greater stress upon the culpability and

complicity of the German army in the Holocaust and other mass killings and war crimes of the Nazi regime.[3] From a military perspective, the Wehrmacht is no longer considered to be as irresistibly effective as it once was. *The Myth of the Eastern Front* provides a landmark discussion of precisely why this revision is necessary, and the grounds upon which this myth came to fruition. Although the book has its shortcomings the core idea is a powerful one, and the work of Smelser and Davies stands as an important reminder of the inherent plasticity of history and collective memory.

Endnotes

1. Highlighted in the text as examples of historical works assuming German superiority are Colonel Trevor DuPuy's *A Genius for War*, John Ellis' *Brute Force*, R.H.S. Stolfi's *Hitler's Panzers East*, and Martin van Creveld's *Fighting Power*. Not included, though they could have been, are titles such as John Mosier's *Cross of Iron* and *The Blitzkrieg Myth*, Niall Ferguson's *The Pity of War* (for the First World War), and DuPuy's *Numbers, Prediction, and War*.
2. See, for example: Michael Doubler's *Closing with the Enemy*, Keith Bonn's *When the Odds Were Even*, and David Glantz and Jonathan House's *When Titans Clashed*. From a Canadian perspective, Terry Copp's *Fields of Fire* and *Cinderella Army* have done much to exonerate the performance of the Canadian Army in combat against the Germans in Northwest Europe.
3. For a few recent works, see: Wolframe Wette's *The Wehrmacht: History*, Myth, Reality, Stephen Fritz's Frontsoldaten, and Geoffrey Megagree's *War of Annihilation*.

GUY SIMONDS AND THE ART OF COMMAND

COPP, Terry, Canadian Defence Academy Press, Kingston, 2007, 210 pages.
ISBN D2-185/2007E 0-662-44588-0

Reviewed by Lieutenant-Colonel P.J. Williams, CD

The aim of the Canadian Forces Leadership Institute's (CFLI) Strategic Leadership Writing Project is to produce detailed studies of senior Canadian commanders both past and present. Those interested in the history of the Canadian Army in the Northwest European Campaign in World War II will certainly welcome their latest product, a study of General *Guy Simonds* by Professor Terry Copp.

In the author's own words, the aim of the book is to "document the ideas on leadership and command expressed by Lieutenant-General Guy Simonds while serving as General officer Commanding 2nd Canadian Corps." As such the scope of the book includes the major battles and campaigns of 1944-45: preparations in England prior to D-Day, the fighting in Normandy and later operations in the Rhineland and the eventual liberation of Holland.

The book covers the campaigns chronologically by chapter and also includes chapters devoted solely to topics such as battle exhaustion and morale, as well as a chapter covering the period Simonds was Acting Commander 1st Canadian Army, while the incumbent General Crerar was ill. Those chapters covering actual operations begin with an overall description of the respective battles and campaigns and end with extracts of documents issued under Simonds' own signature. Several annexes at the back contain articles he wrote for Canadian Defence Quarterly (CDQ) in 1939 on various doctrinal subjects. It is worth noting that at the time of writing those articles, Simonds was a Captain and five years later had achieved 3-star rank, commanding a Corps on operations. Finally the work is liberally illustrated with maps and photos to provide context for the operational narrative.

While descriptions of Canadian Army and Corps operations will be familiar to most readers on the subject, it is Simonds' own word, reproduced in the directives, letters, and articles in the book that form its core and which are the most engaging. There is no doubt that Simonds was a consummate professional and this comes across quite clearly in all his writings: his *Operational Policy 2nd Canadian Corps*, written in February 1944 before the Normandy invasion is a document of great prescience, outlining his design for battle for the operational environment he envisaged, and which as it turned out, he encountered that summer. Indeed, it could be said that he had been preparing for this all of his professional career, if his pre-war writings in CDQ are any example. In a series of articles with such titles as *An Army that Can Attack-A Division that Can Defend* and *What Price Assault Without Support* it becomes quite evident that Simonds devoted a serious amount of time to the study of his profession, time, it would appear was well spent. Some of theses articles were part of an ongoing CDQ correspondence between Simonds and Col (later LGen) ELM Burns, who would command 1st Canadian Corps in Italy. I thought it would have been useful to include Burns' articles as well, to put Simonds' thoughts in context, but this is a small omission in an otherwise very good study.

Simonds was not one to shy away from those subjects which nowadays would be referred to as sensitive, and so in a directive entitled *Efficiency of Command* he devotes paragraphs to a section called Removal of Officers. He would actually put this in to practice, when he relieved the Commander of the 4th Canadian Armoured Division during the Normandy Campaign.

As I read through the book, I often found I was comparing the policies and thoughts Simonds expressed and how soldiers of today would respond to them. Two areas in particular caught my interest:

♦ In a directive dated July 30, 1944 at the height of fighting in Normandy, Simonds addresses the issues of rest, training and morale. In his view "Rest will not be interpreted as leaving the soldier to himself to do nothing or as a time for relaxing of discipline and indulgence in license." Such periods were intended to restore the soldier to full fighting efficiency as quickly as possible. After the first 24 hours (where a soldier was given time for sleep and sorting out his kit) officers were expected to conduct instruction on matters such as discipline, traditions and the higher conduct of the war. Passes into towns were forbidden as was the consumption of alcohol in unit lines. Time was also devoted to organized sports and training for future operations.

♦ Honours and Awards. In a directive of February 26, 1944, Simonds lays out his policy on this matter in a five page document. Simonds' policy stated inter alia, that, "Except in most extraordinary circumstances, acts of gallantry **NOT** directly contributing to damage to the enemy (such as rescuing of our own personnel, salvage of equipment, extricating a unit or sub-unit from a difficult position) will **NOT** be considered for these awards even if performed in the presence of the enemy under fire."

While Simonds might be surprised at current polices regarding leave during operations and honours and awards, we must remember the context in which they were written. Canada, along with its' allied partners was truly a nation at war, and personal considerations usually took second place to the demands of wartime. Having come from a job, where others often wrote things for me to sign, and now being in a staff position where I tend to write for others, I wonder if Simonds wrote his own stuff? I tend to believe he did: certainly most all of the documents are those which a commander must indeed write himself: operational policy, command philosophy and so forth. Furthermore, all of the writings seem to have a very similar style, containing as they do the recurring themes of uncompromising standards and operational efficiency.

In his foreword to the book, the Army Commander, LGen Leslie states that current and future generations have much to learn from leaders of the past such as Simonds. This book is a highly recommended read, particularly for those about to assume command at any level, as it provides an excellent example of how a past commander set his troops up for success, as well as telling the story on how those troops delivered victory.

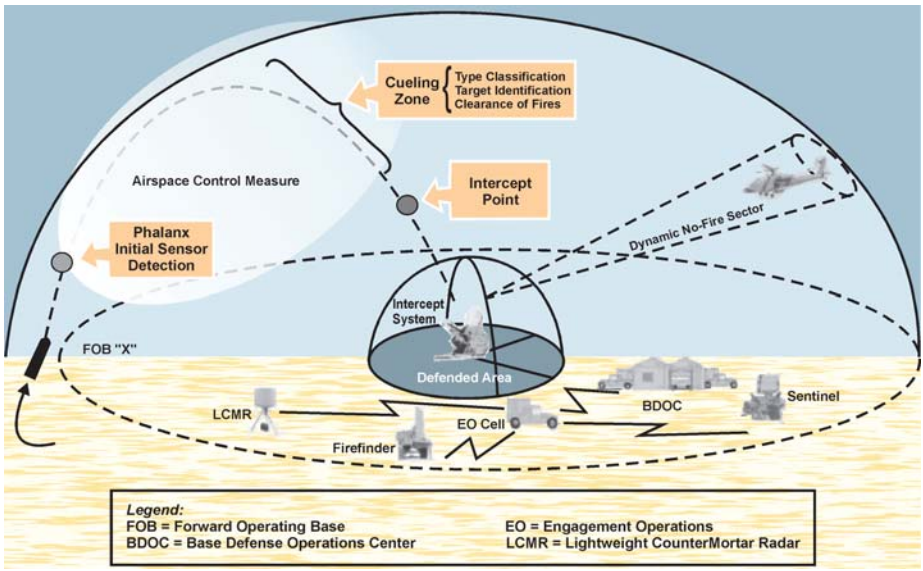
THE STAND-UP TABLE

Commentary, Opinion and Rebuttal

STOPPING THE STEEL RAIN—INTERCEPTING THE ROCKET, ARTILLERY AND MORTAR MUNITIONS THREAT

Major J.J. Schamehorn, RCA, IG, Battery Commander 128th Air Defence Battery / 4th Air Defence Regiment writes…

Indirect fire, even that used by insurgent forces with little technical support or infrastructure, poses a near strategic level threat to Canadian Forces (CF) operations overseas. Indirect fire assets such as mortars, unguided rockets, and field artillery, are still widely available to hostile forces throughout the world. In October 2006, several days before United States (US) Congressional and Senatorial elections, an indirect fire attack was made upon the US forward operating base (FOB) Falcon in Baghdad, Iraq.[1] The bombardment was precise, short, and intended to strike the ammunition compound. It could not have succeeded more spectacularly, destroying the entire ammunition compound and much of the FOB infrastructure surrounding it.[2] Pictures of the devastation stand in stark contrast to the officially released death toll of 19 killed in action (KIA).[3] Fast forward slightly to the summer of 2007 when an unguided Qassam rocket is fired from the Palestinian territories into an Israeli army compound at Zikim in the Northern Negev desert. The rocket strikes a Mess tent during meal hours, wounding 67 soldiers, and nearly forces the Israeli government into a military action to the benefit of Hamas, the terrorist organization which launched it.[4] The aim of this article is to propose a viable intercept capability against the indirect fire threat for use within the CF in the near term.



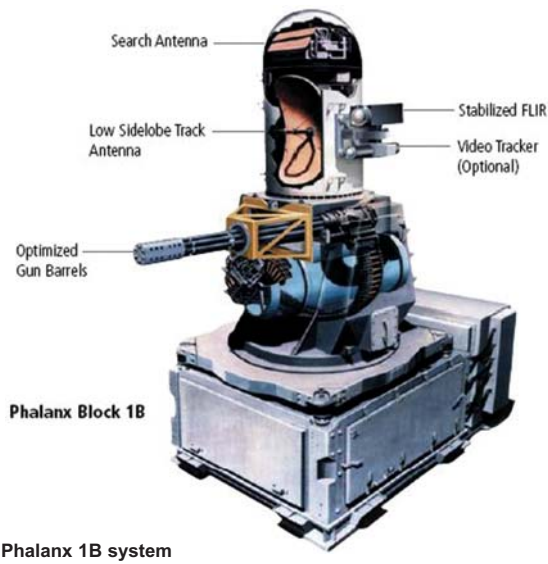
Phalanx-based defence model

Retired British General Sir Rupert Smith articulately describes the military conflicts of today as "war amongst the people," a distinctly different type of war fighting from the era of interstate industrial conflicts.[5] In this environment, indirect fire effects are quite unlike those of previous conflicts. Gone, for the most part, are massed fires with

Canadian Navy Phalanx 1B firing

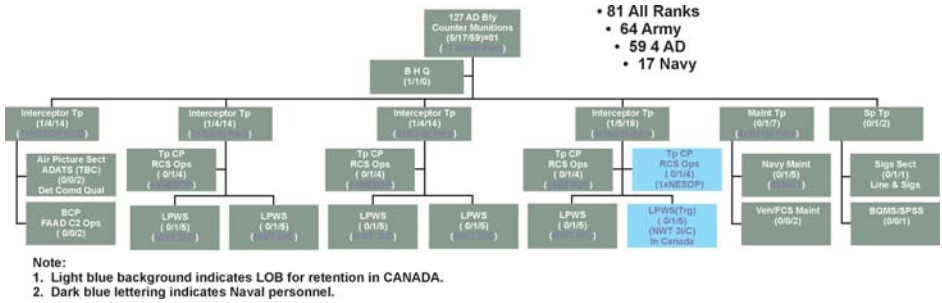
centralized fire control. Current irregular force indirect fire tactics use many ingenious techniques, often with the crudest of equipment and ammunition. Irregular force indirect fires are often little more than individual teams rapidly firing several rounds from the cover of built-up areas and then quickly dispersing. On rare occasions, as in the case of FOB Falcon, these attacks come from several directions with mortars of different calibres. These attacks may be delivered in conjunction with other actions (e.g. vehicle based improvised explosive device [IED] attacks), or set to occur long after the enemy artillerymen have departed (e.g. delayed launch of unguided rockets, and "frozen" mortar bombs). The net effect can best be described as "harassing" fires intended to limit our freedom of action and create an air of constant threat. Static infrastructure, such as main and forward operating bases, are particularly vulnerable to this type of fire. A key principle to opposing force indirect fire strategy is that our opponent needs only to get lucky once, yet our defensive measures need to be lucky every time. Sooner or later, unless some means of deterrence is found, these attacks will result in casualties capable of swaying public opinion, and by this effect, achieve a strategic impact on Western military operations. Considerable research and study is currently underway by the US and the North Atlantic Treaty Organization (NATO) to address the indirect fire threat, specifically because of the strategic implications of such a mass casualty event. The scope of this article is focussed on intercepting these attacks within the framework of larger efforts to counter the indirect fire threat.

In the US, a program called Counter Rocket, Artillery, and Mortar (C-RAM) has been underway since early 2002. A very wide-ranging program encompassing every aspect of the indirect fire problem, it has significantly fielded an active kinetic intercept capability in the Land-based Phalanx Weapons System, or LPWS.[6] The US has fielded the LPWS in limited numbers in Iraq since early 2005 and it is now to be in service with the UK in Iraq as well.[7] Official information on the LPWS remains tightly controlled, but estimates range between 70 to 80% for success in destroying incoming rounds in flight. It will be discussed in more detail later in this article. Within NATO, the defence against mortar attack (DAMA) initiative parallels US efforts to counter the indirect fire threat. Using the same holistic approach as the C-RAM, DAMA seeks to protect NATO troops from the threat of sporadic indirect fire attacks from the 60, 81, and 120 mm range of mortars. So far, it has resulted in stimulating significant research and development into the problem amongst the European defence industry. The current front-running European equivalent to the LPWS is the Rhienmetall "Skyshield" system being championed by Germany.



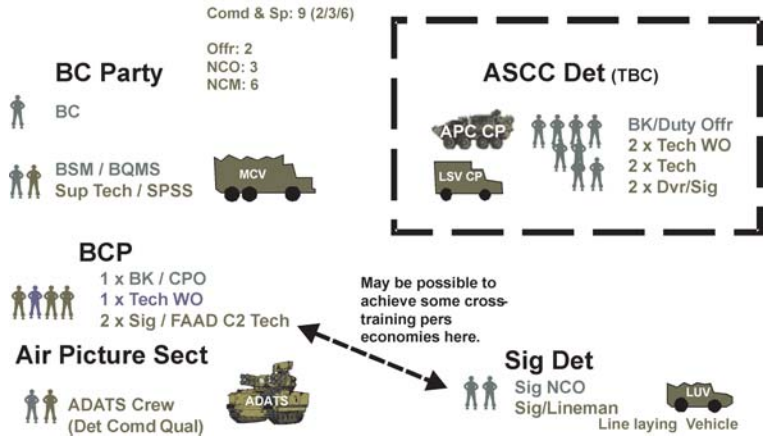
Phalanx Block 1B

Phalanx 1B system



RAMIC Bty—Force Generation

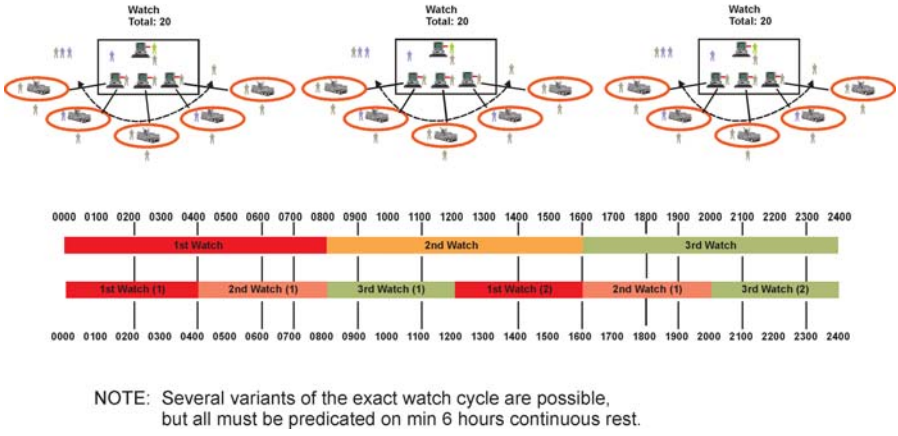
Canada has not been idle in its consideration of the indirect fire threat. In fact, the Canadian Artillery is a world leader in this capability, although it is oriented towards the defeat of aerially delivered munitions (i.e. launched from planes or helicopters) versus artillery indirect fires. Air to ground munitions have been a clearly recognized threat since the widespread use of stand-off munitions such as the Maverick air-to-ground missile, the Hellfire anti-tank guided missile, and an entire range of laser / global positioning system (GPS) guided bombs.[8] Using the Oerlikon Skyguard air defence radar and GDF-005 twin 35 mm cannons firing the Advanced Hit Efficiency and Destruction (AHEAD) ammunition, it was possible to shoot down air to ground missiles under certain conditions. Although these systems were retired from service last year, the concept of kinetic sub-munitions is at the very heart of the Rhienmetall "Skyshield." The principle remains the same regardless of the method of launch of the munitions, ground or air based. A very small object (i.e. small radar cross section or "RCS") must be detected with enough time to engage and destroy it before the results of the engagement adversely impact the protected asset. So, what could Canada do to counter the indirect fire threat faced daily by forces in Afghanistan and potentially anywhere else in the world our Nation's will sends the CF? The easiest solution would be to capitalize on the success of the US C-RAM program through the use of the naval Phalanx 1B close-in weapons system, as they have done with the LPWS.



Comd & Ancillary Tps

The Canadian Navy currently uses the Phalanx 1B Close-in Weapon System (CIWS) on all major surface vessels. This 20 mm cannon is paired with two radars and a sophisticated fire control processor enabling it to detect very small targets approaching

at high speeds, which are calculated to impact the ship (or critically, in the case of the LPWS, an area around the barbette) and destroy them. It has been in use in this capacity since the first Gulf War with the Canadian Navy. One idea, considered under the name "rocket, artillery, mortar intercept capability" or RAMIC, would be to borrow sufficient numbers of these guns for temporary conversion to the land-based variants.[9] It is a delicate balance. A vessel lacking a CIWS mount is not operationally deployable into any threat area, so the minimum number necessary to achieve a clearly defined anti-munitions task must be stipulated. A detailed study of Task Force Afghanistan indicated that a total of six Phalanx 1B systems would be sufficient to provide the operational flexibility to protect either a main operating base (MOB) or several FOBs, with a training resource in Canada for force generation. It is an economical idea, and practical in that the numbers of these weapons is very limited globally, so production time is greatly decreased by simply converting, as opposed to manufacturing, the systems. The entire project could amount to less than $52M (Canadian) and be built in approximately six months based upon 2006 estimates. However, this cost does not include the airspace surveillance sensor necessary for the system, as this is being considered under the Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) project. It does include monies to refurbish the barbettes for return to the Navy once the task is complete. But equipment is one thing; skilled personnel is quite another.

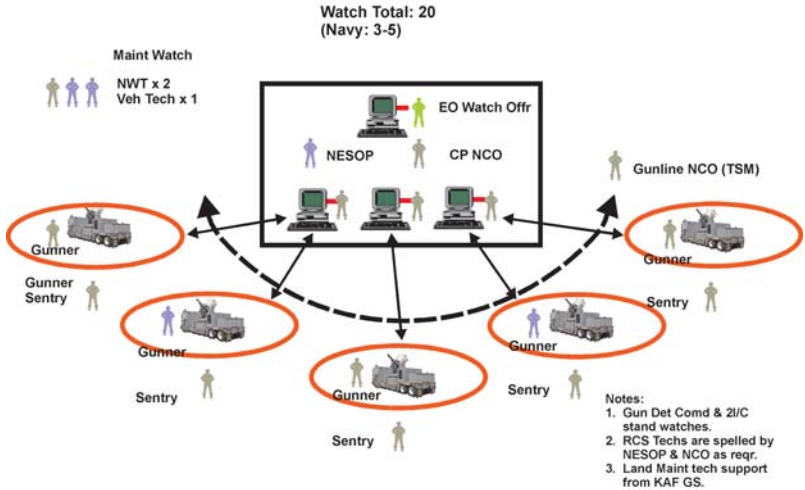


Three Watch Organization

Manning is always a sensitive issue and no less so because of the skills necessary to operate the Phalanx in a completely new environment and role. It was determined that the RAMIC battery organization would be based upon the personnel necessary to "destroy a 20 second threat in 10 second, anytime." The levels of alertness necessary to do this on a 24/7 hour basis were determined to be 20 personnel per watch, with three watches per day. When combined with the necessary command and ancillary troops, the deployed battery would number 70 personnel between the Artillery and the Navy. Further study indicated that a reserve of at least one LPWS detachment and one troop command post crew would be required, bringing the complete battery to 81 personnel. The keynote here is that to deploy the force, 70 personnel would be required for the function.

The RAMIC battery manning would, by necessity, be a joint Army/Navy effort. The knowledge and experience necessary to initially field the Phalanx resides with Naval Weapons Technicians (NWT) and Naval Electronic Sensor Operators (NESOP). Since the NWT trade is distressed, and NESOP availability is limited, complete or long term

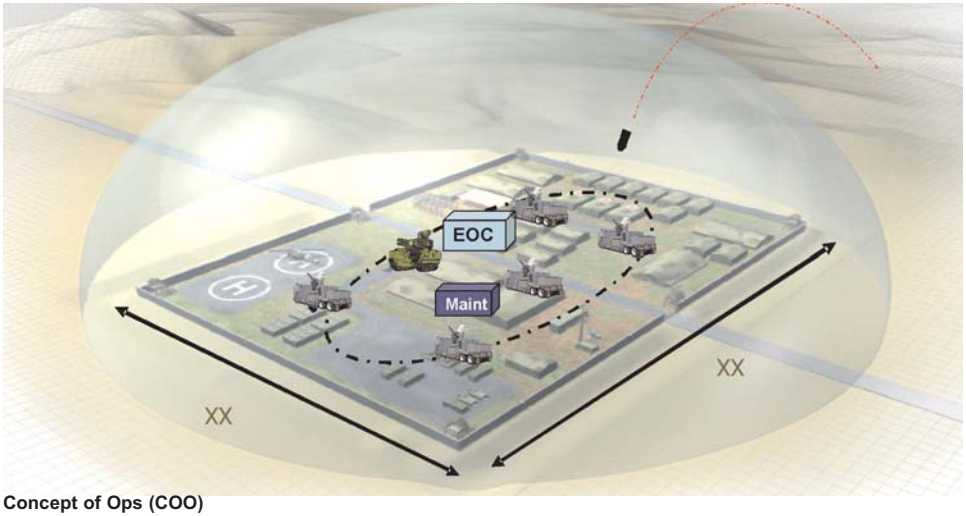
naval manning of the system in Afghanistan was not a viable option. To mitigate these difficulties, ground based air defence (GBAD) artillerymen already fluent in surface to air engagements, could be trained and mentored by naval personnel until such time as sufficient experience were established. At this point, the GBAD personnel could assume the operations of the weapons and engagement consoles, leaving only a minimal NWT presence for detailed 1st and limited 2nd line maintenance. Early examinations into this manning model were very positive, and naval staff and personnel expressed great interest in the prospect of participating in such an endeavour.



Watch Manning

An essential addition to the battery is the dedicated airspace surveillance sensor necessary to feed the Blue air situational awareness (Blue SA) into the system. This information permits the "interruption" of an engagement across any bearing of fire between the LPWS and a friendly aircraft. It is a critical enabler around an airfield. The US deployment of the LPWS "around the busiest airfield in the world" was often stated as having the complete confidence of the US Air Force against fratricide. For the least possible disruption to the engagement (i.e. the most precise Blue SA), a "3D" radar, such as a Giraffe or Sentinel, is used in this role. In lieu of a decision from the ISTAR project, the air defence anti-tank system (ADATS) was considered for the role of airspace sensor, with minimal manning necessary to operate statically in this function. One radar was allocated to the Battery as sufficient for one MOB task. Should the commander wish to support a FOB defence, consideration should be given to including one air sensor per deployed troop (potential increase of four personnel, and two air sensors).

As noted earlier, the 81 personnel RAMIC battery deployed only 70 personnel into theatre to provide anti munitions intercept of a MOB or several FOBs. Though not an especially large unit, the simple truth was that current numbers of trained personnel (Navy and Army), in conjunction with existing operational commitments near immediate force generation timeframes, did not permit a six month rotational period. Detailed consideration was given to a nine month tour given that personnel, though directly involved in combat activities, would reside "inside the wire" (diagram 4). This was deemed feasible within the time limits of the current mandate until February 2009. It also provided sufficient time to train completely new personnel for successive rotations.



Concept of Ops (COO)

In conclusion, the technology not only exists, but it is in operational use to shield our forces from the enemy's indirect fire attacks. It exists to provide the protection necessary for the mission critical infrastructure deployed at the end of a long resupply chain, of vulnerable airheads, and vital command and control facilities. Most importantly, it exists to provide some measure of the protection our soldiers deserve when they come back "inside the wire" from the dangers they face daily outside of it. Every round a LPWS engages is a round directed towards an attack on Canadian soldiers; every round intercepted are casualties and damage prevented. Canada has not only the plans, but also the means to provide this protection. The question remains if, like the US and UK, it has the will.

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TESTING THE ALLIANCE: NATO IN AFGHANISTAN AND THE GLOBAL WAR ON TERRORISM

Mr. Will Chalmers writes ….

In many ways the September 11th terrorist attacks on the United States (US) marked the beginning of a new era for the North Atlantic Treaty Organization (NATO) and the West. Its purpose and future once in considerable doubt, NATO moved to condemn the terrorist attacks and pledged its support for US military operations to eliminate the terrorist threat from the Taliban controlled country of Afghanistan. From the initial commitments of low numbers of special operations forces, NATO nations gradually increased both the number of troops and the scope of the mission. Instead of merely defeating al-Qaeda forces in Afghanistan, NATO now sought to help Afghans create a free and democratic government in the war torn country. While all the NATO allies can agree upon the need to create a functioning and representative Afghan government, there remain many differences regarding the prosecution of the Global War on Terrorism (GWOT). These differences in policy towards the GWOT are evident in the greatly varying commitments each NATO nation is willing to make in Afghanistan. It can be said, therefore, that while within NATO there is a general agreement on goals, the actual means reveal a gulf between the US and some of its NATO allies.

Created at the beginning of the Cold War to defend Western Europe from the conventional forces of the Soviet Union, NATO has evolved into an organization with far broader responsibilities and commitments then its founders envisioned. Membership in NATO has oddly enough grown, while its original rival Russia has weakened since the height of the Cold War and currently poses a much diminished threat to Europe. With a membership of 26 nations, including some who had been part of the Eastern bloc during the Cold War, NATO can, on paper, field a formidable array of military power. This military capability is much reduced from its Cold War peak, but nonetheless represents a significant force.

With its expanded membership and still searching for a reason for its continued existence, NATO took note of the obvious failures of the United Nations (UN) and began to look “out of area” for new missions.[1] The Balkans and specifically the Kosovo campaign were NATO’s first attempts at a new type of mission that had not been part of the original mandate for the organization. While victorious in these limited campaigns, NATO displayed many weaknesses that would become even more apparent as the organization struggles to define and achieve its aims in a more violent war in Afghanistan.

The sheer audacity and immense destruction of the September 11th attacks on the US caused NATO to invoke Article 5 of its charter. The article declared that the terrorist attack on the US represented an attack on all NATO members and would be met, as such, by the military forces of all member nations.[2] All NATO members were in agreement that the US should be assisted in its attack on al-Qaeda and the Taliban forces that sheltered them. The Taliban government had made few allies abroad during its years in power and thus were a relatively easy target for the alliance. The consensus on participation was made easier by the fact that the operation would require a very small commitment of non-US troops in the initial phase. NATO allies were able to assist in important but less dangerous and arduous tasks such as intelligence, over-flight rights, and naval forces to patrol the Pakistani coast.[3] Most of the difficult and dangerous tasks would be done by the Northern Alliance, the US and a few of its close allies. Therefore, it was without considerable internal disagreement that NATO slid into its first real war in a theatre that bears little resemblance to the Northern European battlefields

upon which it planned to fight.

The initial phase of the newest Afghan war progressed far faster than even its most ardent supporters had hoped. Instead of the oft-predicted long and bloody war in the mountains of Afghanistan, the Northern Alliance with US and allied special operations forces routed the main Taliban forces and rapidly swept southward.[4] The quick defeat of Taliban and al-Qaeda forces was thought by many to mean the end of intense combat in the country. Less combat capable NATO contingents could now arrive and assist the new government of Afghanistan in building up the organizations and infrastructure needed for a modern functioning state.

After a request from the new Afghan government and the UN, NATO agreed to provide forces to help Afghanistan with a number of tasks deemed essential.[5] This commitment, made in a period of relative calm in the country, has now come under serious strain with the renewal of fighting in a number of areas. The return of the Taliban and the subsequent increase in violence has exposed the differences within NATO as to the importance of the mission, and as a result, the varying willingness to shoulder a part of the burden.

Many of the larger European NATO members have so far refused to commit their troops to any situation that would entail regular combat against Taliban forces. With the exception of the British, Dutch and Canadian contingents, most NATO troops have been kept in areas deemed to be relatively secure.[6] To further restrict their use, many of the NATO members have placed extremely restrictive caveats on the use of their forces in Afghanistan.[7] These caveats have the effect of creating a two-tiered alliance with some members willing to undertake dangerous tasks while others hide behind these restrictions.[8]

Another factor is the growing gap in capabilities between US forces and those of their allies. Many NATO members have lagged behind the US military as it pursues "transformation." This factor makes interoperability and cooperation on the battlefield much more difficult.[9] The frustration within the US about their NATO allies' unwillingness to be more flexible with their troops has become public several times, but has not yet significantly altered or improved the situation.[10] With so few NATO troops in Afghanistan to begin with, and many of those limited by national caveats, commanders have a great deal of difficulty crafting a coherent strategy, and in particular, responding to unforeseen actions by the enemy.

The reluctance by many NATO members to place their troops in dangerous situations in Afghanistan is largely a reflection of the domestic opinion within these countries. Even if Afghanistan is seen as the "good war" compared to Iraq, European public opinion has been generally unsupportive of the current counter-insurgency campaign being waged in Afghanistan and the wider US-led Global War on Terrorism.[11] Therefore, it seems unlikely that the NATO countries currently doing most of the fighting in Afghanistan can expect any new large scale commitment from their European allies. These nations simply do not place the same importance on the GWOT and remain suspicious of unchecked US power.

As a result of the general unwillingness of many NATO nations to commit forces to combat roles, the US and a select few countries have and probably will continue to do most of the more dangerous work in Afghanistan. The recent increase of US and British forces in the southern part of Afghanistan is largely a reflection of this reality. NATO contingents of less-willing or less-able members can continue to perform important but less dangerous tasks behind this shield. Within the larger GWOT this likely means that the US will increasingly rely upon a small number of close allies. Many of the older original members of NATO have now drifted away from the US while newer members,

often from the former eastern bloc have aligned themselves more closely with US interests.[12] For some of these countries, the decision to support US objectives hinges less upon Afghanistan and more upon their own perception of national interest and longstanding fears of more powerful neighbours. Overall, the Afghan experience has exposed the vastly differing positions within NATO members on the necessity and proper course for this larger war.

While NATO countries have committed to the goal of a stable, free and functioning Afghan state, there are obvious differences with regards to the effort needed and the relationship to the wider GWOT. The reluctance to deploy more troops and the prevalence of national caveats are all indications of this difference of opinion. The actual conduct of operations within NATO, and specifically the International Security Assistance Force (ISAF), also illustrates the gulf between the US and some of its historic NATO allies. While the NATO nations see many important benefits in a stable Afghanistan, the increase in violence in recent years and the allied response has exposed the very real differences over the prosecution of the war in Afghanistan and against terrorism worldwide.

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