CANADIAN MILITARY JOURNAL

National Defence   Défense nationale

Canada

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A CC-177 *Globemaster III* aircraft prepares to land at Thule Air Force Base, Greenland, after dropping off equipment at Canadian Forces Base Alert during Operation *Boxtop,* 30 September 2016.

Credit: DND photo TN11-2016-0804-018 by Corporal Ryan Moulton

Core Competencies and the Army: A Complex yet Potentially Rewarding Relationship

From an International Strategy to Tactical Actions: How Canada Could Run Campaigns

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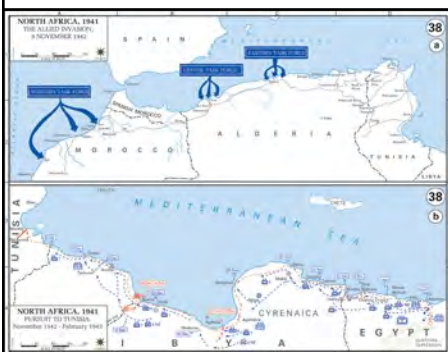
Canadian Infantry in North Africa, January–May 1943

CANADIAN MILITARY JOURNAL

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NOTE TO READERS

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

EDITOR'S CORNER

Welcome to yet another frosty edition of the *Canadian Military Journal.* While it is still autumn in the Great White North as I pen these words, the Farmers' Almanac is calling for a nasty one and the horses are growing their winter coats. And they are, respectively, *hardly ever,* and *never* wrong…

Taking point in this issue, armoured officer Major Chris Young discusses the Canadian Army's recently embraced concept of core competencies, which its leadership believes are "…the most important functions or groups of functions that define the basic purpose of the Army of Tomorrow." After a broad overview of the core competencies concept as it has developed in various business and military environments, Canadian and foreign, Young then explores the various core competency *frameworks* being adopted within those environments in an attempt to identify best practices associated with core competency development.

Next, tactical aviator Colonel Erick Simoneau "…seeks to bridge the dichotomy between the Canadian Armed Forces' mandate and its budgets, by offering a manner of intervention that is Canada-specific and designed to protect Canada's national interests and values." Simoneau maintains that this would be a nationally-unifying initiative that through focusing upon 'pan-governmental and niche expeditionary stabilization operations, would "…position Canada as a credible actor within the international community, while taking into account budgetary and geopolitical realities."

Moving right along, Major James Pierotti, an air combat systems officer with extensive experience in the Search and Rescue (SAR) community believes that SAR "…is but one aspect of a larger capability called Personnel Recovery (PR) that uses aircraft and helicopters, not just in a domestic environment, but also in a deployed and foreign combat environment." After exposing Canada's very limited PR policy through comparison with that of Canada's allies, Pierotti identifies small changes "…that could provide the CAF a smooth integration into the PR organization of any future coalition. It will be argued that Canada requires additional PR policy and training in all branches of the CAF to better integrate with coalition partners for future combat operations."

Reservist and academic Lieutenant-Colonel James McKay then reflects upon a recent experience as the Canadian Joint Operations Command (CJOC) Liaison Officer to U.S. European Command, and seeks to put paid to the notion that liaison officer positions are "…generally perceived as either a reward for a long career, or as an easy task for a senior officer between more important positions in Canada." After examining the duties of liaison officers to foreign military headquarters at both operational and strategic levels in order to offer some insights on the challenges and benefits associated with those positions, McKay ultimately concludes with "…a discussion of the challenges experienced by the hosting headquarters, and then, a summary of challenges faced and proposed solutions to those challenges."

Two very different articles in our historical section this time out. In the first, historian and museum consultant Daniel Pellerin focuses upon the little-known Canadian participation in the Second World War's North African Campaign as part of a troop lending program designed to provide selected Canadians with combat experience. Pellerin believes that this troop lending program was a success, particularly for the infantry members, because "…the experience that infantry officers and NCOs gained serving in front-line units marked an important phase in their training. As intended, they were able to bring this experience to their home units to prepare them for upcoming operations in the Mediterranean and Northwest Europe."

In the last of our major articles, historian Sean Maloney focuses upon a little-known aspect of the Cold War, namely, the strategic importance to the USSR of the Pacific Northwest. Maloney notes that while the world's attention was focused upon the Caribbean, the eastern seaboard of North America, central Europe and the Inner German Border, the Pacific Northwest was considered "a strategic backwater with almost no public attention directed towards it. Yet, in the late-1950s and early-1960s, there were *significant* if low key developments undertaken by the Soviet Union that put this region 'under the mushroom cloud,' as it were." Furthermore, Maloney believes that had nuclear war erupted, there would have been significant ramifications for Canada's west coast population centres and defence establishments.

This brings us to our two very different Views and Opinions pieces. In the first, heritage consultant and historian Diane Joly examines the commemorative monuments that grace the core of downtown Montreal in Dorchester Square and Place du Canada. Joly suggests that in Montreal at the dawn of the 20th Century, multiple visions of Canada co-existed. For example, "Some citizens, mainly Anglophones, viewed Canada as a colony with a duty to contribute to the prestige of Great Britain. Others, mostly Francophones, saw it as an autonomous power within the British Empire. In the middle were the moderates, who wanted the two groups to get along and live together in harmony." She then offers that the commemorative monuments in the aforementioned locations are illustrative of those visions, and collectively, that they "…show how the site originally symbolized British power, but gradually came to reflect contemporary Canada and Montreal."

The second opinion piece by Research Fellow Debalina Ghoshal provides an update as to why Poland recently decided to finalize an agreement to buy a Raytheon-made *Patriot* air and missile defence system for the nation. She further states that this new missile defence system in Poland will form a component of the European Phased Adaptive Approach, which is planned to become operational in 2018.

Then, our own resident commentator Martin Shadwick takes a look at the current state of the Royal Canadian Navy and planned maritime futures for this fighting force.

Finally, as is our wont, we close with a number of book reviews that hopefully will pique the interest of our readership during these cold winter months.

Until the next time.

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

LETTER TO THE EDITOR

Sir,

The article by Tremblay and Coombs (Vol. 16, No. 3, Summer 2016) on *The Reserve Force: Quo Vadis* is one in a fine series of commentaries and studies that no doubt started when Canada passed its first Militia Act in 1855. Based on my own experience, we are actually not much closer to knowing what we want from our Reservists, either individually or as units. Part of the challenge is that we may be encumbered by too much history as to how our Reserves developed. The Naval Reserve was created in the 1920s to perpetuate a naval footprint in the country when we would not fund a proper regular Navy. The Militia, with its history of numerous and honourable regiments across the land, struggles even today to be fit for purpose, with many units too small to field even a company. It is true that there have been ebbs and flows, and when the call has come, such as in the Second World War or Afghanistan, the Reserve and Reservists rose to the occasion.

There may be some confusion as to what we want Reservists to do. Do we want the mosaic of units across the country to provide a measure of military involvement in the community? Or do we want units to be force generators which can 'cough up' personnel for whatever requirement may exist at a point in time? In some measure, our encouragement of full-time Reservists (manning the MCDVs in the Navy, or augmenting battle groups in Afghanistan, as examples) has rather obscured the original purpose of the Reserve. Reservists have always been limited by how much time they have *to train*, and how much time they have *to deploy*. Over the years, there have been financial challenges that inhibit training time or equipment provision to the Reserve. Perhaps the concept of Reserves as amateurs no longer fits.

Promoting Reservists to be on full-time active duty, in my opinion, seems to dodge the issue. If so many Reservists can spend so much time on active duty, and if this is needed by the Regular Force, perhaps they should do a component transfer for the time they are on extended active duty? (I am talking about those who are away for years, not weeks or months) How can we do better in promoting the health of local units when we seem to be taking away so many of their trained personnel?

Perhaps we need a whole new model, and the authors suggest several skeins to this, such as employing specialist medical and legal folk who are not attached to units, or bringing in selected civilians for certain tasks. One area which still deserves more attention is persuading ex-Regular personnel to join the Reserve in some useful capacity when they release. While many may have had 'enough,' there are more who could be persuaded to become part-timers. The bottom line for me is that we need to determine what we want our Reservists to be: trained part-timers who can support requirements in a limited way, or virtually full-timers who are, in fact, an organic part of the Regular Force.
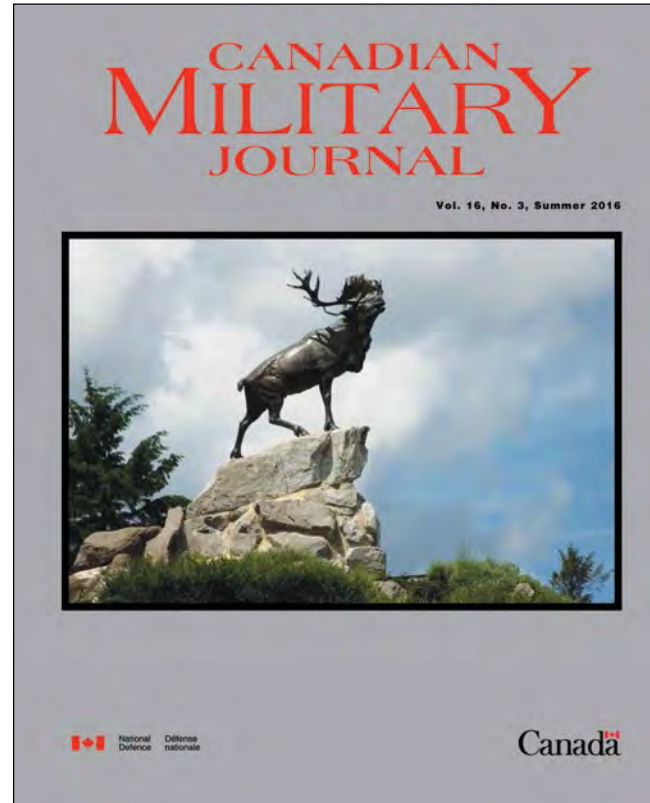
I fear that the health of today's Reserve Forces may indicate that we are not doing very well with either approach.

Yours sincerely,
An Old Reservist, David B. Collins

U.S. Air Force photo 160724-F-LX370-019 by Justin Connaher

Core Competencies and the Army: A Complex yet Potentially Rewarding Relationship

by Christopher Young

Major Christopher Young, CD, *is an Armoured Officer (Lord Strathcona's Horse) with over 30 years of service in the Canadian Army. He is currently employed with the Canadian Army Land Warfare Centre, working within the Concepts team on the Army of the future. He is also a doctoral candidate within the History Department at Concordia University, examining the effects of Western interventions on Haitian development.*

Introduction

"The CF has one core competency and that is, when necessary, to fight."[1]

The Canadian Army has recently embraced the concept of core competencies, calling them "… the most important functions or groups of functions that define the basic purpose of the Army of Tomorrow."[2] The primary purpose of any army, first and foremost, is to keep its nation safe and secure. It does this by having the capabilities necessary for fighting and winning a nation's wars. Yet, those capabilities are understood, at least within our current international construct, as providing a purpose of last resort.

While keeping the nation safe and secure may involve combat or warfighting on Canadian soil in some extremely unlikely scenario of last resort, more typically, the Canadian Army fulfills that function of keeping the nation safe and secure via expeditionary operations that are designed to contribute to international peace and security. That often involves the conduct of activities and operations that demand skill sets other than those usually associated with warfighting: increasingly, those skills are more properly associated with what has become known as nation-building. Thus, while warfighting is indeed an integral part of the Army's core missions and may, in fact, be a core competency, it may not be the Army's *only* core competency.

Aim

The aim of this article is an exploration of the simple yet complicated relationship the Army enjoys with core competencies. I propose to begin with a broad overview of the concept of core competencies as it has developed in various environments, including the business and military worlds, and subsequently explore the various competency frameworks being employed within those environments with an aim of identifying best practices associated with core competency development.

Background

Thus far in the short time since the Army has embraced the core competency concept, that purpose has manifested itself within a framework that has identified the Army's core competencies as almost exclusively centred on close combat or warfighting. In 2003, the Directorate of Land Strategic Concepts (DLSC) publication *Future Force: Concepts for Future Army Capabilities* specifically identified the Army's core competency as "the ability to conduct land combat in order to fight and win in war."[3] It was qualified as being the result of a desire to ensure the Army does not "…lose focus of those things that matter most and that are central to its identity and purpose."[4] This was, in part, the beginning of the tendency to conflate competency with purpose: indeed, *Future Force* went on to state that the "…fundamental purpose [of the Army] is to defend the nation and its vital interests. To do this it must rely on its core competency…"

By 2011, the Army was identifying its core competencies as the following: "…the capability to win close combat; the capability to conduct close engagement (stability tasks); and the capability to set the essential conditions to enable success in close combat and in close engagement."[5] All three competencies were defined in relation to combat, and all three were identified without any indication of *how* or by *what process* they were chosen. By 2014, Army leadership had narrowed that list down to a single competency: "the ability to engage and win in close combat across the full spectrum of operations."[6] Colloquially, the Army's core competency has become identified simply as warfighting.

That decision to identify core competency with warfighting has inspired some unease. In 2014, the Army's strategy stated the following:

> "[although] the primary purpose of Canada's Army is to defend the nation and fight for its national interests… this does not mean the Army exists solely for combat or warfighting…the Army…must be prepared to support domestic security missions…and to externally support international security operations whether combat, stabilization, or assistance."[7]

The strategy document went on to identify warfighting or combat operations as "clearly the core or primary task" for the Army, but also identified what have been termed 'secondary missions' in both stabilization and assistance operations.[8] Finally, and perhaps the most telling, is the following statement: "…the agility to transition and adapt to varying operational conditions will be key characteristics that leaders and soldiers will require."[9] Through extrapolation, it should become obvious that the Army, as an institution, would similarly require like competencies that allow such ease of transition and adaption. This intriguing statement also clearly points to the Army requiring a more in-depth understanding of the role of core competencies within its strategic framework vis-à-vis transition and adaption, and it points towards the need for the development of a framework to rationalize and validate the choice of core competency or competencies (something currently missing).

Understanding Core Competency: Various Perspectives…

> *"The military saying that 'time spent in reconnaissance is rarely wasted' applies just as clearly to the more personal kind of reconnaissance within your own front."*[10]

At first blush, the argument can be made that the Canadian Army has been fairly indifferent to the core competency concept. As noted earlier, the concept of core competency was first explored in 2003 by the Army's Directorate of Land Strategic Concepts in their *Future Force: Concepts for Future Army Capabilities*.[11] The concept was not well-developed at the time, nor was any thought given to whether core competencies would need to be revisited at any point in the future. Perhaps most damning, the concept as articulated within the DLSC document tended towards conflation of purpose with core competency, a major shortcoming, given the literature on core competency that was available at the time.

The concept was revisited in 2009 via *The Army: Advancing with Purpose (2nd Edition)* which simply identified core competencies as "those capabilities…critical to the Army," and can be illustrated as follows in Figure 1.[12]

2009 Army Relationship	Capability	=	Core Competency
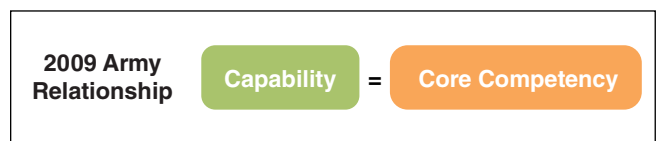
Figure 1

In essence, the Army defined competencies as capabilities by another name: what elevated their importance was recognition that they were "…those capabilities that are critical to the Army as they define out essential contributions to the Defence Team achieving Canada's defence objectives."[13] Formal doctrine from that time does not make clear by what process those capabilities were defined nor how they were determined, nor how they were validated/measured as providing an 'essential contribution' to defence objectives.

By 2011, that position had undergone revision: the simplistic equating of capability to competency was removed. Instead, *Designing Canada's Army of Tomorrow: A Land Operations 2021 Publication* included the statement that "all capabilities will be designed to deliver the functions that provide or support the core competencies (see Figure 2)."[14]

> **"All three competencies were defined in relation to combat, and all three were identified without any indication of *how* or by *what process*" they were chosen."**
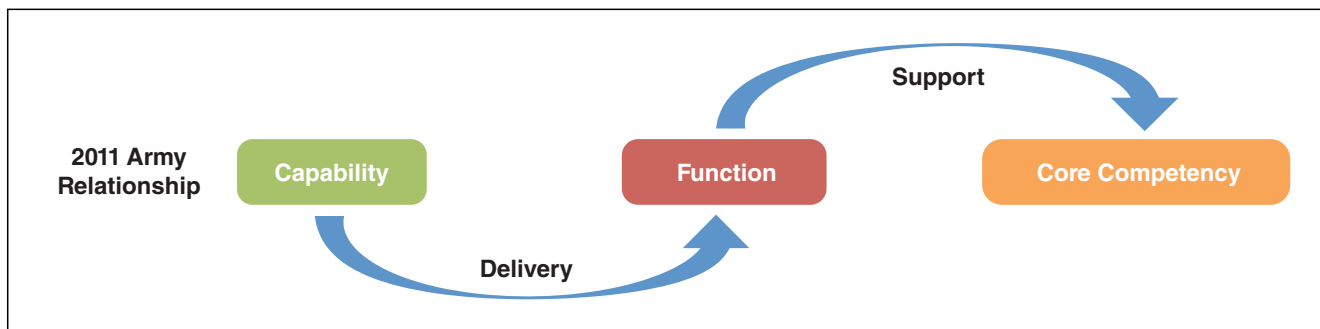
Figure 2

While this can be seen as a slight improvement by moving the core competency concept away from the earlier simplistic equation and the redundancy that equivalency created, the publication nonetheless maintained a doctrinal silence with respect to concept definition, development and validation. What the publication did accomplish, however, was to situate the core competency concept firmly within 'futures' work. It formally recognized core competencies as being central to the Army of Tomorrow. "[The] Army of Tomorrow will have at its foundation the ability to deliver its core competencies."[15] What it failed to identify was how those core competencies would be identified, and how they were tied into capability development.

The Business World and its Experience with Core Competency

It should be noted that the Army's shifting understanding of core competencies is not unique. Other fields that have embraced the core competency concept have likewise rethought the best means of employing the concept to derive value. In point of fact, the business world is often considered to be one of the leaders in this area, the concept having been 'birthed' through the 1990 emergence of the now-seminal article, "The Core Competence of the Corporation," authored by the two business academics, C.K. Prahalad and Gary Hamel.[16] They specifically identified core competencies as needing to "constitute the focus for corporate strategy."[17]

This appears similar to the Army's focus wherein core competencies or capabilities have a direct relationship on the achievement of Army objectives. However, where the business world differs from the Army is in their orientation towards adaptation and sustained competitiveness. "In the long run, competiveness derives from an ability to build, at lower cost and more speedily than competitors, the core competencies that spawn unanticipated products."[18] That desire to spawn new products marks the concept as an important element of a learning organization. As Prahalad and Hamel stated, core competencies are the result of "the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies…Core competence is communication, involvement, and a deep commitment to working across organizational boundaries."[19] Within the business community, core competencies are often mentioned in the same breath as intellectual capital.

Core Competency and the United States Army Experience

Turning away from the business world, perhaps the most mature core competency concept of any Allied military can be found within the doctrine of the US Army. That maturity notwithstanding, it also suffers from many of the same limitations and issues that plague that of the Canadian Army.[20] The US Army model can be illustrated by Figure 3 below.

The US Army model, like that of the Canadian Army, is one of aggregation. However, whereas the Canadian Army views core competencies as 'the most important functions or groups of functions that define the basic purpose of the Army of Tomorrow,' the US Army defined their core competencies in terms of core mission areas. Specifically, core competencies for them are defined as "aggregate capabilities of functionally-organized capabilities associated with the performance of, or support for, a DoD core mission area with the services performing the tasks and activities that supply these capabilities."[21] Functional capabilities are rolled up into 'joint capability areas,' (JCAs), each of which becomes known as a core competency which in turn support one or more joint mission areas.

Core competencies first showed up in US Army doctrine in the 1990s and were brought into strategic thinking specifically to support downsizing and/or outsourcing of capabilities and/or functions.[22] The intent was to identify those 'things' the Army should do and should retain within its programming while allowing those other 'things' to either be outsourced or lost through defence cuts. By 2001, the concept had been expanded into the area of "acquisitions and capabilities management." Core competencies were very basically viewed within the idea of "core and non-core functions."[23] By 2005, core competencies had undergone yet another strategic revision and were now identified as those "fundamentals of the Army's operational concept, full spectrum operations [FSO]."[24]

That operational construct was both externally focussed and geared towards meeting the need to conduct FSOs. With that in mind, the US Army determined two JCAs as their core competencies: "combined arms maneuver and wide area security [CAM and WAS]."[25] Both competencies were defined as enabling specific effects:

> "…we will emphasize our Army's ability to conduct both combined arms maneuver and wide area security – the former necessary to gain the initiative and the latter necessary to consolidate gains and set the conditions for stability operations, security force assistance, and reconstruction."[26]

As with the Canadian Army, the US Army has moved core competencies away from an internally focussed process and instead built it into their capability development framework. Major Richard Dunning of the US Army, in a monograph written at the School of Advanced Military Studies, United States Army Command and General Staff College, pointed out that, because the various US armed services had problems translating the business-based conceptual framework into the military context, they instead opted for an "interpretation [that] reflected an emphasis on output focused capabilities as opposed to internal capabilities that leverage others."[27] Indeed, by 2011, the US Army was identifying its core competencies in reference to the ability to master a "rapidly evolving and increasingly competitive strategic environment…[that] has given rise to the manifestation of hybrid threats…"[28] Core competencies remained linked to national strategy and were identified as such by the value of their contribution to national security specifically.

One of the complaints repeatedly cited regarding US Army core competencies, a criticism that can also be levelled at the Canadian Army choices, is the over-emphasis upon combat when defining competencies.[29] That over-reliance was recognized in 2011. Seeking to correct it, the US Army introduced what it termed "enabling competencies." As of 2011, seven have been identified: "Support security cooperation, Tailor forces for Combatant Commanders, Conduct entry operations, Provide flexible mission command, Support joint and Army forces, Support domestic civil authorities, and Mobilize and integrate the Reserve components."[30] They are now considered "fundamental to the Army's ability to maneuver and secure land areas for the joint forces," and can be seen as "an attempt to better address the Army's contributions to unified action partners across the range of military operations."[31]

> "Turning away from the business world, perhaps the most mature core competency concept of any Allied military can be found within the doctrine of the US Army."

Author
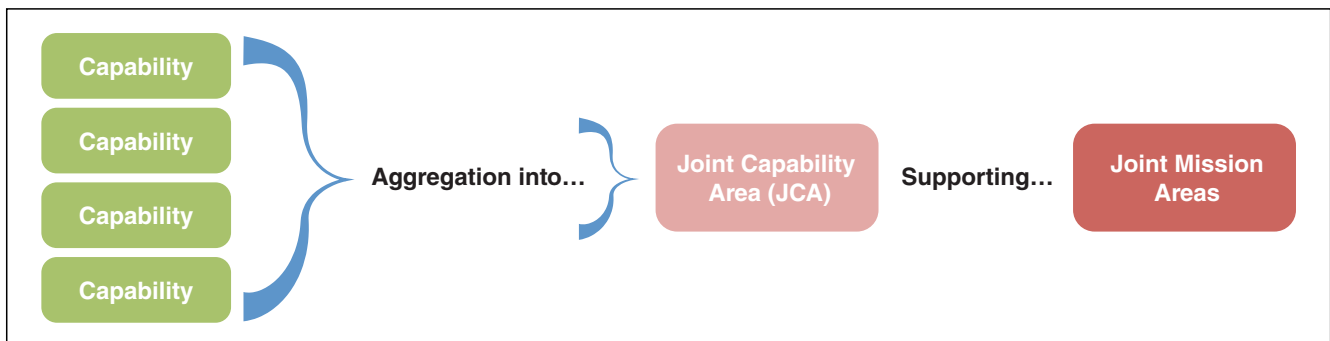
Figure 3

Dunning has identified other limitations in the US Army approach to the core competency concept. He believes that the choice of CAM and WAS were too "abstract," leading to a lack of specificity in terms of "an understanding of requisite tangible or intangible assets."[32] Nor does he believe that they offer any indication of how competitive advantage or value is created for the Army. From his perspective, "...since competencies are based on doing capabilities that are performed routinely and evaluated against the competition, CAM and WAS do not meet the basic definitional requirements."[33] It should be noted that he considers the core competency concept for the Army from the context of business doctrine: ergo, the choice of CAM and WAS, through that lack of specificity, "...lack context to understand who is the customer, what is the basis of competition, and what it means to have competitive advantage." Dunning argues for the adaptation of business doctrine regarding core competencies to the military's unique situation. Thus far, in his opinion, the concept has been both misunderstood and misapplied. The same arguments can be made about the Canadian Army approach and the choice of close combat as the core competency.

Core Competency and the United States Marine Corps (USMC)

In 2011, the USMC identified six core competencies within *The Marine Corps Vision and Strategy 2025*, clearly tying core competencies to their strategy. Specifically, core competencies within the Marine Corps are spoken of in connection to the Marine culture, that being the expeditionary mindset. The core competencies themselves are tied to the question, "What does the Marine Corps do?" and are specified as follows:

- Conducts persistent forward naval engagement and is always prepared to respond as the Nation's force in readiness.

- Employs integrated combined arms across the range of military operations and can operate as part of a joint or multinational force.

- Provides forces and specialized detachments for service aboard naval ships, on stations, and for operations ashore.

- Conducts joint forcible entry operations from the sea and develops amphibious landing force capabilities and doctrine.

- Conducts complex expeditionary operations in the urban littorals and other challenging environments.

- Leads joint and multinational operations and enables interagency activities.[34]

What is clear from reading the six competencies identified is that USMC leadership subscribes to the rather simple equation of *core competencies* equalling *core capabilities*. All six 'competencies' describe capabilities possessed by the Marine Corps, and do indeed answer the question, 'What does the Marine Corps do?' What *should* be asked, however, is the question, 'What makes the Marine Corps unique?' Interestingly enough, MCDP 1-0 begins to answer that question in the follow-on section dealing with 'Power Projection,' which hints at the Marine Corps' real core competency from the perspective of uniqueness.

DoD photo 140410-F-RH756-669 by Staff Sergeant Jonathan Snyder

Core Competency and the United States Air Force (USAF)

Moving to its sister service, the USAF similarly considers core competencies within its strategic planning process. Core competency, for them, is defined as "the combination of professional knowledge, specific air power expertise and technological capabilities that produce superior military outcomes."[35] Not surprisingly, the core competency process for the Air Force is not static: technological evolution, changing expertise and changing political realities all influence changes to core competencies. In 1997, for example, the USAF had identified six core competencies: "air and space superiority; global attack; rapid global mobility; precision engagement; information superiority; and agile combat support."[36] By 2014, that list had shrunk to three: "developing Airmen, technology to war fighting and integrating operations" – which in turn, like the US Army's 'enabling competencies, were linked to six "distinctive capabilities..."Air and Space Superiority; Global Attack; Rapid Global Mobility; Precision Engagement; Information Superiority; Agile Combat Support; and Core Values."[37]

Lessons and Creating a Framework for the Army

The military experiences of both Canada and the United States, when dealing with core competencies, has been to build them around warfighting. At the same time, unease with that approach has led the US Army and Air Force to differentiate between core and enabling competencies. By and large though, core competencies by all four US services, and the Canadian Army, for that matter, have a more-or-less straightforward and simplistic relationship between capability and competency. None have identified the framework by which competencies were developed, and none have defined the relationship between competency development and the capability development framework. Finally, in both the US Army and Air Force cases, as with the Canadian Army, the development of core competencies has been based upon an aggregation model that assigns value to capabilities based on their relationship to core mission areas. This includes the idea of levels of aggregation, with scope for differentiation between core and enabling competencies.

Writings on the US experience indicate that the concept has been subject to adaptation, based upon experiences and writings of the business community, specifically the influence of Prahalad and Hamel. What this has meant is that any core competency framework is an internally-focussed process, the intent being to identify "the internal strengths of the organization."[38] Working with that intent, then, the Army's competency framework should fulfill two basic functions: a process for identification of the Army's core competencies, and a process for validation/rationalization of the same.

For the latter, Prahalad and Hamel have established what are largely seen, within the business world and outside, as universal criteria for the identification of core competency: that they "…provide access to a wide variety of markets…make a significant contribution to the perceived customer benefits of the end product…[and] should be difficult for competitors to imitate."[39] While

> **"Moving to its sister service, the USAF similarly considers core competencies within its strategic planning process."**

DND photo VL08-2016-0020-062 by Sergeant Marc-André Gaudreault

these criteria were developed for the business community, they can easily and readily be adapted for use by the military community. The first criteria – providing access to a wide variety of markets – can be viewed in one of two ways for the Army.[40] Very loosely, 'access to markets' could be interpreted to imply a capability to conduct FSO. Alternately, that access could relate to the idea of operating within the Joint-Interagency-Multinational-Public (JIMP) environment.[41] Both are linked within the overarching umbrella of the comprehensive approach to operations and the related idea of collaborative working.[42] This in turn provides us with potentially useful criteria for adjudging core competencies for the Army: namely, that they facilitate the conduct of FSO within the JIMP environment.

The second criteria – make a significant contribution to the perceived customer benefits of the end product – requires the Army to determine both its customer base and its core (end) products. On the former, the Canadian Army has a number of customers it needs to consider when determining its core competencies, both internal to Canada and external to the nation. First and foremost, internally, as a public service entity, it is obviously beholden to the Canadian public for promoting efficiency and economy while working towards its core mission of ensuring Canada remains safe and secure. Second, the Army has a customer in the form of the Canadian Armed Forces leadership (specifically, the Commander of Canadian Joint Operations Command (CJOC)) that it needs to satisfy through its three key functions of management, training, and sustainment of the land force.[43] Third, and related, is the Government of Canada leadership, which looks to the Army for a useful product that is *flexible* in employment and *adaptive* to rapid change while still remaining *efficient* and *economical*. Externally, the Army has an obligation to meet the expectations of

its key Allies and related international organizations, such as the United Nations and NATO. The product provided by the Army, and employed and controlled through the CJOC, must therefore be of such a standard that it continues to be welcomed into strategic alliances and remains standardized to the degree necessary for operations at home and abroad with key partners.

Determining the Army's core products lies within the strategic context of its employment. The Army's end product is "… combat-effective, multi-purpose land forces [that] meet Canada's defence objectives…"[44] To provide that product, the Army has branded itself as "the CAF's centre of expertise for land operations which includes providing the land component of a joint force and preparing other military personnel engaged in land operations."[45] To accomplish its mission and produce the land forces necessary to contribute to CAF operations, the Army fulfills three key functions which allow for the production of those land forces: the development of land force capabilities; the training of Army personnel and units to provide those capabilities; and the management of land force personnel, equipment, and infrastructure in support of those capabilities.

For the CAF, then, the Army can be seen as loosely representing the 'business unit' responsible for land forces. At the Army level, however, those three functions manifest themselves into what can loosely be terms 'business units.' Broadly speaking, a land force capability development process, a training system, and a management system. Populating the Army's current capability relationship model ends up generating the following, keeping in mind this is based on the sole current core competency identified by the Army, loosely adapted to business modelling (see Figure 4).

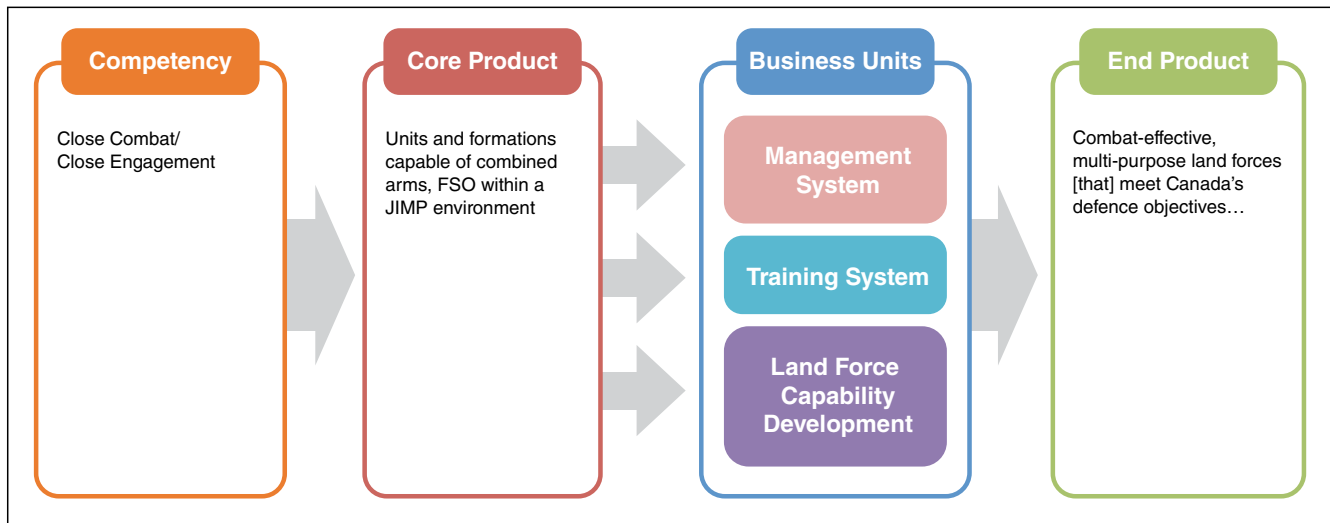| Competency	Core Product	Business Units	End Product
Close Combat/ Close Engagement	Units and formations capable of combined arms, FSO within a JIMP environment	Management System Training System Land Force Capability Development	Combat-effective, multi-purpose land forces [that] meet Canada's defence objectives…

Figure 4

The last criteria – that core competencies should be difficult for competitors to imitate – requires an understanding of competition within the Army context. Core competencies, in the business world, are defined in terms of adaptation and competition. When we talk about competition, we need to understand why customers prefer one product or process over that of another competitor. Competition, in the words of Prahalad and Hamel, is based upon "…an ability to build, at lower cost and more speedily than competitors, the core competencies that spawn unanticipated products."[46] Competition speaks not only to cost and differentiation, it also speaks to adaptation to changing market conditions. Without understanding that duality, and in turn, defining that duality in terms of competitors, a company will fail within a competitive marketplace.

For the Army, adaptation is critical. It backstops our current force employment strategy of contributions to adapted dispersed operations (ADO), and is integral to the CAF's conceptualization of the future operating environment (FOE), which requires the Army to be capable and ready for surprise and uncertainty. The Canadian Army has adopted the capability-based approach to force development and not a threat- or adversarial-based approach. Thus while potential adversaries end up on the receiving end of the Army's processes or products, and would appear to have influence in the development of core products, the reality is that the Army develops those products within the framework of full spectrum operations. By not making reference to specific adversarial activities or campaigns (for example, counter-insurgency), the Army is able to avoid "outcomes oriented functions," and instead, remain true to the idea of core competency identification, based upon "the internal strengths of the organization."[47]

From an internal point of view, the Army possesses three potential broad competitive groupings, each of which need to be understood to determine their potential influence on the determination of core competencies. The first of the broad groupings is that of the other services: competition within the domestic joint environment. Competition within this environment is largely based upon budgetary considerations. With finite resources available, justifying large equipment procurements becomes more competitive, and being able to differentiate the Army from the Air Force and the Navy becomes more important. Core competency development in such an environment has also been historically rather simplistic, with the Army seizing upon the idea that its core competency is that of expertise in close combat.[48] Indeed, the Army's current espoused core competencies - "the capability to win close combat; the capability to conduct close engagement (stability tasks); and the capability to set the essential conditions to enable success in close combat and in close engagement[49] - can be seen as fulfilling that historical lineage. However, this applies only when viewed as being unique and hard for our naval or air force brethren (competition) to duplicate.

Consider those same core competencies against the Army's second competitive grouping: that of close allies and partners, such as the United States, Great Britain, and Australia. Against such competition, the Army's core competencies can quickly be seen as neither unique nor have they proven particularly hard to replicate within allied nations. If the Army approached core competencies from an Allied competition point of view, the logical approach would instead be to identify what allows the Army to make a unique contribution to alliance or coalition operations. The Army's competition can be broadened further and moved to focus on those competitors Canada is likely to serve alongside in either coalition or alliance operations: United Nations operations as an example. Within such an environment, Canadian core competencies could be seen to include more intangibles: strong adherence to ethical behaviour, or the idea of mastery of "the art of the conscionable," for example.[50] Indeed, if we examine the warfighting construct within a coalition or alliance setting, the idea of mastery of ethical warfare can be seen as a competitive advantage. Similarly, our ability to maintain a significantly lower environmental footprint compared to international peers while on expeditionary operations may also provide a clue to a core competency. The key is defining those competencies in relation to the Army's international (partners) competition.

The last grouping to highlight is competition from so-called private military companies (PMCs). As with any potential competitor, the Army needs to recognize its core capabilities and ensure its contracts do not lead to a PMC infringing upon the Army's core processes and products, both of which are determined through

the identification of core competencies. Dealing with Army core competencies and the impact of PMCs on operations is outside the scope of this article, but it is a subject that needs to be visited at some point. One final note on outsourcing and core competency… We need to understand that outsourcing is the means by which an entity, such as the Army 'frees up' resources by contracting for those services previously provided. Those now 'freed-up' resources can instead be devoted towards performing core processes, and, in turn, allow for the reinforcement of core competency development. Outsourcing cannot become code for abandoning core competencies to others.

The Way Ahead?

It is clear, from the literature available and past experience dealing with core competency within the business and military communities, that continuing to simply regard core capabilities as some form of aggregation of capabilities without a supporting framework is intellectually dishonest and an unsound practice for the Army. In an era of fiscal restraint, during which it becomes more vital than ever to maintain core competencies, the Army risks either losing key areas which underpin those competencies, or, perhaps worse, it risks funding areas that do not contribute to core competencies, leading to the removal of scarce and valuable resources from vital areas.

Core competencies can be seen as serving a critical function. They allow an organization to identify those elements, processes, and so on, which are critical to the production of their core products. Without such identification and protection, organizations risk eliminating those elements which allow that production. Cutting budgets, for example, through 'cross-the-board' measures are dangerous in this regard, as are contracting out services without completing core competency identification.

Richard Dunning has pointed out that the US Army has held onto its outcomes-based approach to operations, and has avoided embracing core competency-based management practices.[51] The same could be said for the Canadian Army. For the Canadian Army, core competencies clearly need to be defined within the understanding that we have embraced full spectrum operations. It is quite clear that the current Army core competency - the ability to engage and win in close combat across the full spectrum of operations – will remain extant. What is not clear in the absence of a proper and rigorous analysis is whether there are other core competencies the Army needs to identify and develop to ensure it is capable of full spectrum operations within the future security environment.

> **Richard Dunning has pointed out that the US Army has held on to its outcomes-based approach to operations, and has avoided embracing core competency-based management practices."**

<div style="border:1px solid red; display:inline-block; padding:4px 12px;">**NOTES**</div>

1. J.W. Hammond, "First Things First: Improving Canadian Military Leadership," Proceedings and Papers of the Conference on Ethics in Canadian Defence, 1998. Online at http://www.forces.gc.ca/en/about-reports-pubs-ethics/1998-conference-military-leadership.page.

2. It should be noted that this article is tackling the issue of institutional core competencies and not individual core competencies which are different both in derivation and in concept. Canadian Army, *Designing Canada's Army of Tomorrow: A Land Ops 2021 Publication*, (Kingston: Directorate of Land Concepts and Design (DLCD), 2011), p. 89.

3. DLSC, *Future Force: Concepts for Future Army Capabilities*, 2003, p. 153. Note that the DLSC document represented a futures concept piece rather than an authoritative pronouncement on core competencies.

4. *Ibid,* pp. 154-155.

5. *Ibid,* p. 48. Note that, doctrinally, core engagement has not been defined.

6. Canadian Army, *Advancing with Purpose: The Army Strategy, 3rd Ed.*, 2014, pp. 2-3. Note, again, that *Designing Canada's Army of Tomorrow: A Land Ops 2021 Publication,* is a future concepts document, whereas the 2014 document, *Advancing with Purpose: The Army Strategy, 3rd Ed.*, was an Army strategy document and therefore directive. At the same time, the focus should be upon the nature of the core competencies, and not upon the change from three-to-one competency.

7. *Ibid,* p. 156.

8. *Future Force: Concepts for Future Army Capabilities* employs the term 'task' interchangeably with 'mission.' Combat operations are identified as both a primary mission and a core or primary task for the Army.

9. *Ibid,* p. 158.

10. Captain Sir Basil Liddell Hart.

11. Please note that this was a conceptual paper and not doctrinal.

12. It should be noted that the Army has not been alone in adopting a simplistic definition of core competency. The Cambridge Performance Partners, for example, published a 2013 on-line document that showed a direct relationship (equation) between 'What a firm can do' (capabilities) and "What a firm can do uniquely" (core competencies), stating, "Core Competencies are capabilities that have developed to the point where they provide a source of competitive advantage for an organization." See http://www.cambridgeperformancepartners.com/storage/performance-insights/CoreCompetencies.pdf.

13. Canadian Army, *The Army: Advancing with Purpose, 2nd Edition*, Ottawa: Director Land Strategic Planning, September 2009, p. 23.

14. *Ibid,* p. 48. The Army definition of a function – "A broad, fundamental and continuing activity" – has been adopted by the Defence Terminology Standardization Board (DTSB). However, the Government of Canada Termium provides an alternate definition for function – "The general end or purpose sought to be accomplished by an organizational unit" – which is taken from the field of corporate management and may in fact be more appropriate to our discussions, given that core competencies lie largely within the management field.

15. *Designing Canada's Army of Tomorrow*, p. 48.

16. Note that when talking about a business or company, I am employing the terms interchangeably, but with the fundamental understanding that I am referring to 'for-profit' commercial entities. C.K. Prahalad & Gary Hamel, "The Core Competence of the Corporation," in *Harvard Business Review*, Vol. 68, No. 3 (May/Jun 1990), pp. 79-91. Note that US Army Lieutenant General Frederick Rudesheim makes the case that an earlier concept – "invisible assets" – by Hiroyuki Itami, a professor at the Tokyo University of Science, was the first articulation of what became known as core competencies. See Frederick Rudesheim, "Discovering the Army's Core Competencies," US Army War College, 19 March 2001.

17. Vytautas Boguslauskas & Goda Kvedaraviciene, "Difficulties in identifying Company's Core Competencies and Core Processes," in *Engineering Economics*, Vol. 62, No. 2 (2009), p. 78.

18. Prahalad & Hamel, "The Core Competence of the Corporation," p. 281. From Cynthia A Montgomery & Michael E Porter, *Strategy: Seeking and Securing Competitive Advantage*, (Boston: Harvard Business School Publishing, 1991).

19. *Ibid,* p. 82.

20. For an excellent discussion on the limitations regarding the US Army experience with core competency and potential solutions for the way ahead, see Richard E Dunning, "The Army's Core Competencies,"(Fort Leavenworth, KA: US Army Command and General Staff College, May 2013).

21. *Ibid,* p. 6.

22. *Ibid,* p. 4.

23. *Ibid.*

24. Jeremy Sauer, Chris Stolz & Michael Kaiser, "Core Competencies for an Army of Preparation," in *Army*, February 2014, pp. 42-43.

25. U.S. Army, *Army Doctrinal Publication 1.0: The Army*, 2012.

26. US Army General Dempsey, in FM 3-0 *Operations*. Quoted in LTG Robert L Caslen Jr. & LTC Steve Leonard, "Beyond the Horizon: Defining Army Core Competencies for the 21st Century," in *Army*, July 2011, pp. 24-28.

27. Dunning, p. 4.

28. Hybrid threats are defined as "combinations of decentralized and syndicated irregular, terrorist and criminal groups that possess capabilities once considered the sole purview of nation-states." See Caslen Jr. & Leonard, p. 25.

29. See Sauer, Stolz & Kaiser, p. 43.

30. *Ibid,* p. 44.

31. *Ibid,* p. 43. Interestingly, and as a side note, while the Canadian Army has not followed suit in this regard: there are no 'enabling competencies' identified within our doctrine, it has nonetheless included within *Advancing with Purpose* the statement that "…the Army must be able to set the essential conditions to enable success in both close combat and close engagement." (*Advancing with Purpose* (2014), pp. 2-3.) It is not clear whether this was intended to allude to the need for additional (enabling) competencies or whether this was a sop to the former 2011 competency troika.

32. Dunning, p. 43.

33. *Ibid,* p. 40.

34. United States Marine Corps Doctrinal Publication (MCDP) 1-0, *Marine Corps Operations*¸ 09 August 2011, pp. 2-19 to 2-20.

35. Remarks from 18 October 1996 speech by then-USAF Chief of Staff General Ronald R Fogleman, speaking to the Air Force Association Symposium in Los Angeles.

36. Robert S Dudney, "The Core Competencies of the Force," in *Air Force Magazine*, January 1997, p. 24.

37. The USAF web site currently identifies six 'distinctive capabilities': "Air and Space Superiority; Global Attack; Rapid Global Mobility; Precision Engagement; Information Superiority; Agile Combat Support; and Core Values." See USAF website online at http://www.airforce.com/learn-about/our-mission. Again, as with the US Army's list, it could be argued that the USAF enabling competencies herein were missions or tasks rather than competencies.

38. Dunning, p. 7.

39. Prahalad & Hamel (1990), pp. 83-84.

40. A market from an economic point of view is considered to be something which enables exchange. It can include systems, institutions, processes, relationships or specific infrastructure. That exchange can include goods, services, or information.

41. The JIMP environment is defined by the Army as "a framework of joint, interagency and multinational partners, in a public environment, who cooperate at all levels of command to achieve shared objectives." Note that JIMP for the Army is Joint Inter-agency Multinational and Public, whereas for the CAF Joint community, JIMP is considered as Joint-Integrated-Multinational-Public. (Joint Terminology Panel). *Integrated* is identified as achieving a common goal through coordinated and complementary efforts. See B-GL-300-001/FP-001 *Land Operations*, 01 Jan 2008, Section 213, Para 3, pp. 2-14.

42. Collaborative Working has been defined as "the process by which the collective intellectual power, experience and knowledge of command and staff teams are applied to a common intent." (DRDC definition). However, that definition is limited, and should be expanded to be more inclusive within the comprehensive approach to operations. At the Army level, that approach emphasizes the JIMP environment.

43. More accurately, that sustainment function can be seen as generating ready land forces for operations.

44. *Advancing with Purpose* (2014), p. 9.

45. *Advancing with Purpose* (September 2009), p. 7.

46. Prahalad & Hamel (1991), p. 4.

47. Dunning, p. 7.

48. It could be argued that the development of the Family of Land Combat Systems represented a holistic and sophisticated attempt to develop equipment procurement within the joint environment, but it has been the exception rather than the rule.

49. *Designing Canada's Army of Tomorrow,* p. 48.

50. Such consideration moves the discussion of core competencies firmly into the realm of mixing tangible and intangible, which, surprisingly, is exactly what should happen (and all too frequently does not). Considerations, for example, of Canadian cultural values of tolerance and multiculturalism need to be factored into core competencies like our Army training system. Jim Storr, "Neither Art nor Science – Towards a Discipline of Warfare," in RUSI Journal, April 2001, p. 42.

51. Dunning, p. 51.

Carl von Clausewitz

From an International Strategy to Tactical Actions: How Canada Could Run Campaigns

by Erick Simoneau

"No one starts a war – or rather, no one in his senses ought to do so –without first being clear in his mind what he intends to achieve by that war and how he intends to conduct it."[1]

– Carl von Clausewitz, *On War*, 1832

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Introduction

Canadian politicians generally defend the idea that Canada has earned a seat at the table with the major world powers through its participation in the two world wars, numerous United Nations missions, and, more recently, operations in Afghanistan. However, not everyone agrees with this, and some are critical of Canada's small military budgets and the lack of clarity regarding its international policy,[2] arguing that Canada cannot really be seen as a credible actor on the world stage. Most political experts agree that defence is a discretionary expense that is taken seriously only when economic conditions permit.

This situation does not make things any easier for the senior command of the Canadian Armed Forces (CAF), which must deal with uncertainty about the size of the budgets it will be allocated for planning its acquisitions and for fulfilling its role in service to the government. Despite that constraint, everyone agrees that our soldiers do what is expected of them very ably, and that they are recognized as one of the most professional and most effective armed forces in the world. In fact, it is very rare for military budget cuts to result directly in a military defeat on the ground.[3]

This article therefore seeks to bridge the dichotomy between the CAF's mandate and its budgets, by offering a method of intervention that is Canada-specific and designed to protect Canada's national interests and values. It is a nationally unifying method that would position Canada as a credible actor within the international community, while taking into account budgetary and geopolitical realities. We will argue that, to achieve this goal, Canada must review its international policies in order to focus them upon specializing in pan-governmental and expeditionary stabilization interventions. That niche role would be Canada-specific and would also be highly valued by the global community.

Our argument will be presented in three sections. The first will look at the current situation and the pitfalls associated with it. The second will discuss Canada's contribution and the role Canada could play by embracing the possibilities offered by the current context. The third and final section will analyze the ways in which the CAF should position itself within this context by building upon its strengths.

"This article is addressed to the CAF senior command, but the recommendations in it cannot be put forward in isolation from the other federal departments or the rest of the political apparatus."

This article is addressed to the CAF senior command, but the recommendations in it cannot be put forward in isolation from the other federal departments or the rest of the political apparatus. However, it does offer a possible solution that would enable Canada to run campaigns at some future date,[4] as would any nation that wants to acquire the means to influence its destiny within the world order of today.

"Fire and forget" missions

"Failing to adequately link tactical action to national strategic objectives is both a technical and moral breach of considerable significance, with far-reaching repercussions." [5]

– Colonel Jonathan Vance,
Tactics Without Strategy, 2005

Canada's "grand strategy" is not explicitly defined in official government documents. But military historian Desmond Morton sums up its foundations when he speaks of Canadians' conviction that their country is simultaneously "indefensible and invulnerable."[6] Canada's propensity to participate in deployments as part of a coalition, forge multilateral alliances and defend the rule of law above all else springs from the knowledge that this country depends on its allies and on respect for international rules to protect its interests. Our alliance with the United States under the auspices of NORAD[7] clearly demonstrates this. Some go so far as

The current Chief of the Defence Staff, General Jonathan Vance (centre)

DND photo FA2013-5100-15 by Corporal Vicky Lefrançois

Canadian CF-18 *Hornets* from Cold Lake, Alberta, and Russian Su-27A fighters from Anadyr, Russia, practice procedures to transfer a simulated hijacked airplane from Russian to American airspace during NORAD Exercise *Vigilant Eagle 13*, 28 August 2013.

to say that Canada does not act based on its national interests, but rather in the service of more global interests, in concert with its allies.[8] However, that perspective also encourages Canada to view its armed forces as a form of currency to be exchanged. They are deployed in the service of global actors, and in return Canada gains a certain status and a voice among the major powers on international issues.[9] Others note that Canada contributes effectively to global interests, but with less than maximum effort.[10] We will examine all this more closely.

Colonel Vance—who today is a full general and the CAF's Chief of the Defence Staff—summarized the situation in 2005: "In general terms, therefore, CF mission success is defined by its tactical presence in a theatre of operations rather than its tactical performance in achieving Canadian strategic objectives."[11] He concluded that Canada does not run campaigns, since it does not decide on the strategic objectives to be achieved.[12] In other words, Canada sends its troops overseas under the command of coalitions whose strategic objectives are rarely determined by the Canadian government.[13] In military language, we could say that those missions are conducted in "fire and forget" mode, like a missile that, once launched, requires no further action from the firer to reach its target.[14]

Some defence experts will say that that approach is very flexible, since Canada commits itself only to the extent to which it feels comfortable, while still taking care not to unduly annoy those that guarantee the protection of its interests, especially the United States.[15] That enables it to contribute, while economizing on effort and cost.[16] Of the G7 countries, Canada invests the least in defence, nor does it rank any better among NATO countries.[17] That flexibility also perpetuates a vicious circle that keeps Canada's military budgets low. Let us now look at how that occurs.

Since the government does not establish specific strategic objectives beyond providing a presence – sometimes referred to as "significant" or "expeditious" – the CAF clearly has a great amount of latitude in the options it presents to the political decision-makers. Often, it will offer only the elements that are available, ready and trained. The CAF is generally recognized for delivering the goods, even as it requests larger budgets to fulfil its mandate.[18] That approach may be reasonable for short, simple missions.[19] However, it might be quite a different story if the government established specific strategic objectives describing specific tactical performance.[20]

And therein lies the danger of Morton's axiom. How can risking the lives of our soldiers be justified if we cannot link their service with concrete strategic objectives decided upon by the Government of Canada? And how can we legitimize such missions and fully communicate them to Canadians if our government does not know the final destination of the "missile" it just fired? Colonel Vance answered that question in the quotation at the beginning of this section. Therefore, we must resolve the paradox of "fire and forget" missions, if only out of a moral duty toward our troops. Disagreements over defence budget expectations must also be settled in the higher interest of our country's civil–military relations.

Two important deductions follow from the preceding analysis. First, Canadian politicians seem to perceive the CAF as a medium of exchange that requires only a low level of political commitment and whose budgets are always deemed reasonable, as long as the objective of *presence* assigned to the CAF is achieved. Second, there is clearly a disconnect between the Canadian government's *expectation*s regarding the employment of its forces and the CAF's opinion of those expectations, as shown by the divergence of

opinions concerning the budgets allocated. We will keep these two conclusions in mind in the following sections. The next section will focus upon the kind of international commitment that Canada might consider in order to fill the moral vacuum described above – that is, to do better than "fire and forget" missions.

"Canada is back"

> *"Since World War II, some of our most costly mistakes came not from our restraint, but from our willingness to rush into military adventures without thinking through the consequences …. Just because we have the best hammer does not mean that every problem is a nail."*[21]

> – Barack Obama, 2014

There is no better time than the present to rethink the way in which Canada contributes to its security, and the approach it has adopted to do so. The mandate to conduct an in-depth review of Canada's defence policy presents the perfect opportunity. In addition, the mandate letters sent to Canada's Minister of Defence and Minister of Foreign Affairs point in the same direction. In both, the Prime Minister sets out the following goals: that Canada engage more in the international community, that it concentrate on peacekeeping missions, and that it carve out a niche in which it can effect real change.[22] The withdrawal of the CF18s and their replacement with a training mission in Iraq, together with the announcement of new missions in Lithuania and Africa, are certainly consistent with this new perspective. In this section, we will address the questions of how those decisions should be interpreted, and how Canada's role in the world can truly be renewed.

The Prime Minister's mandate letters imply (whether based upon a fully informed decision or upon intuition) that recent military operations have not, in themselves, seemed to produce the desired results, and that a more comprehensive approach should be adopted. That point of view is certainly becoming more and more widespread – the Obama quotation at the beginning of this section is one example. Joe Clark, a former Prime Minister of Canada and former Foreign Affairs Minister, makes the same point in his latest book.[23] He suggests that, in order to make a more substantial contribution, Canada should combine the use of its armed forces with an approach based on "soft power," thereby taking advantage of its talent for multilateral efforts.[24] The current government's statement "Canada is back" certainly alludes to it. It also seems that when Prime Minister Trudeau speaks of a return to *peacekeeping* missions, he is contrasting them with *combat* missions.[25] In any case, there is merit in the idea that missions based exclusively on military strength are insufficient. Any attentive observer will have noticed – as has General Philip Breedlove, former commander of the NATO forces – that the military interventions in Iraq, Afghanistan and Libya, and more recently in Syria, do not seem to have stabilized those regions.[26] The operations did manage to contain the terrorist groups, but they did not solve the real problems; at best, they froze them in time.[27]

President Barack Obama

DND photo WG2014-0437-0018

A Canadian CF-18 *Hornet* with two Portuguese F-16s during Air Task Force Lithuania, as part of Operation *Reassurance*

The Canadian Press/Fred Chartrand, Image ID 20140521

Former Prime Minister Joe Clark

Former senator Hugh Segal, who served as Chair of the Senate Foreign Affairs Committee in 2006 and 2007, also stresses that military intervention alone is not effective. His new theory is based upon the primacy of two freedoms that must be provided so that a people can live in stability and peace: freedom from fear and freedom from want.[28] According to this theory, a person or a people must first feel safe in order for innovation to flourish and bring prosperity. However, Segal adds that this freedom (freedom from fear) cannot be eradicated unless freedom from want is also eliminated. Otherwise, peoples are deprived of all hope and fall back into violence, leading once again to the loss of freedom from fear. Segal is describing a vicious circle. What makes his theory interesting is the cause-and-effect relationship between these two freedoms. For him, solving the problems associated with only one or the other of these freedoms is not enough to lead to a long-term solution.[29] In other words, dealing only with safety or development in isolation will lead to failure at the strategic level. Senator Segal's theory articulates what many people sensed but could not express so clearly.

> **"Former senator Hugh Segal, who served as Chair of the Senate Foreign Affairs Committee in 2006 and 2007, also stresses that military intervention alone is not effective."**

If one accepts this theory, then the pan-governmental approach should become the favoured option for any future intervention. But is it a new concept? Some would say no, since the terms "3D approach" and "pan-governmental" have been in use for some time.[30] However, what has become clear is that this approach is a *sine qua non* if we want to deal successfully with the most complex situations.[31] But did we not already know that? No – if we had, the interventions in Libya and Syria would have been handled very differently. Others refute Segal's theory by citing the success of the military approach used during the first Gulf War in 1990–1991. The opposing argument is that military force was sufficient to resolve that conflict because the Kuwaitis never really lost hope or exhausted their resources, i.e., their freedom from want. Clearly, Senator Segal's theory makes a great amount of sense, and it will therefore serve as the foundation for the approach presented in the following pages.

Based upon this theory, we can now make a few important deductions for Canada. First, such an approach would require a unified international policy, since it requires a much more effective integration of the various governmental actors. A defence policy review alone will not be sufficient to bring together all the required stakeholders, but it will be a step in the right direction. However, it must serve as the basis for the formulation of a future international policy – specifically, a unified international policy that will take into account the fact that Canada must no longer intervene without closely examining all aspects of the two freedoms Segal discusses.

Second, it is possible for Canada to make a real contribution to global order if it capitalizes on its strengths and leverages the opportunities that arise. Canada could offer the international community a pan-governmental quick reaction force. Like the United States, which is often perceived as the police or the guardian of the international community, Canada could be its "pan-governmental expeditionary stabilization team."[32] Very few countries have economic and geopolitical situations that would enable them to do

this successfully. Canada does, and it would have much to gain by making good use of those assets.

This approach would require a review of the priorities of the roles assigned to Defence and the other departments that deal with world affairs. For more than 40 years, the priority has been the defence of Canada, then that of North America, and lastly, peacekeeping and maintaining stability in the world.[33] Instead, the government should prioritize the CAF's expeditionary capabilities. Many experts believe, like David Bercuson and Jack Granatstein, that "Canadian governments ... have believed that one key mission of the Canadian military is to deploy abroad...."[34] However, this new priority should not be seen as contradicting those that are already established. The next section will shed light on this point.

Lastly, it is interesting to note the differing points of view concerning the right role for the CAF. These divergences of opinion also explain the mutual incomprehension that results when expectations confront defence budgets.

The Canadian Method of Intervention

"Canada is a fire-proof house, far from inflammable materials."

> – Senator Raoul Dandurand, speaking before the Assembly of the League of Nations, 1924

The analysis presented in the previous two sections of this article reveals some inconsistencies between the current defence policy and the way in which the CAF is employed. In the first section, we established that Canada appeared to use its armed forces as a form of currency, offering its presence in exchange for a voice in international affairs. We also concluded that this way of doing things makes it more difficult to legitimize "fire and forget" missions in the eyes of Canadians, and especially in the eyes of CAF members themselves. In the second section, we demonstrated that exclusively military interventions often do not meet the strategic expectations set by the international community. We then suggested that Canada could become more actively involved by taking on the niche role of providing pan-governmental expeditionary and stabilization power for the international community.[35] In the final section, we will explore how the CAF could position itself within the international community, and could even become its leader.

As we have seen, the *Canada First Defence Policy*, which has been in effect since 2008, establishes the CAF's roles: defend Canada, protect North America, and participate in peacekeeping and maintaining stability in the world.[36] There is no doubt that the CAF's priority must always be to defend Canada. However, that does not mean that the CAF could not also play the role of an expeditionary force.[37] One does not necessarily preclude the other. In the next defence policy, we would do well to transform the current roles into "intervention priorities" in order to leave room for discussion about the best ways to implement them. An expeditionary force could be deployed to defend Canada, protect

Senator Raoul Dandurand, (third from left), at the League of Nations Assembly in Geneva, September 1928

Library and Archives Canada/C-009055

North America, or intervene overseas. It is its *composition and mandate* that should change, not its *intervention priorities*.

The CAF already possesses a considerable amount of expeditionary equipment that is the envy of many countries. The C17s are a good example. The CAF should continue in this vein by shedding its non-expeditionary structure, then by dedicating the positions and budget amounts freed in the process to expeditionary and pan-governmental initiatives. Note that, for the purposes of this article, all the CAF's operational capabilities are considered as expeditionary. We are more concerned here with their role and the structure that supports them.

In fact, it is the CAF's *geographic* rather than its *functional* structure that should be re-examined. But if we accept the idea that even the defence of Canada must be undertaken in concert with its allies, the CAF should stop insisting upon structuring and equipping itself for handling it alone. That is exactly the kind of measure that Canada should consider in order to eliminate all the non-expeditionary tasks and structures for which the Department of National Defence establishes its activity plan and its expectations regarding budgets. CAF expeditionary forces would contribute much more effectively to the defence of Canada and of North America if Canada provided its principal ally, the United

> **"The CAF already possesses a considerable amount of expeditionary equipment that is the envy of many countries."**

States, with a pan-governmental expeditionary stabilization force, rather than trying to reproduce the same operational capabilities that the United States possesses. That could become the "Canadian method of intervention," a method that would be useful for both defending Canada and intervening overseas. The idea of a niche role is even more attractive given that, in the short and medium term, defence budgets will probably remain where they are now in relation to gross domestic product (GDP). Focusing upon expeditionary capabilities would be an excellent way to balance expectations with the CAF's roles and budgets.

A Canada engaged in the world and occupying its own specific intervention niche will also be able to (and will *have to*) formulate its own strategic objectives for intervention. By doing so, it will also put an end to "fire and forget" missions. To achieve that, Canada should always take ownership of the portions of a coalition campaign upon which its departments will be able to work together under a single flag – that of Canada. The operational capabilities deployed could certainly also work as part of a coalition, as long as they do so for the advancement of the strategic objectives set by Canada. It is the *strategic* objectives that must be brought together under one flag, rather than the *tactical* employment of deployed expeditionary capabilities.

A Canadian C-17 loading US air defence equipment on Exercise *Vigilant Shield*, 13 August 2016.

If Canada can accomplish all this, thereby meeting an ever-growing need, it will gain the desired appreciation and recognition from other countries, since few of them will have the agility to do likewise, or even be capable of attempting to do so. That is one of the lessons that General Rick Hillier emphasized in his book *A Soldier First.*[38] For this purpose, Canada should define an area of responsibility (AOR), which may be physical or functional. In Afghanistan, Canada's AOR was physical when its forces were operating in Kandahar Province. A functional AOR might be the reconstruction of a country's roads and electrical network. These examples suggest an interdepartmental intervention that begins with formulating SMART strategic objectives.[39] Those objectives would be formulated jointly by the departments called upon to act, then presented to the ministers' offices for approval. Then, clear strategic communications could be produced that would make it easier to legitimize Canada's operations in the eyes of its forces and the Canadian people.

However, as things currently stand, Canada is not structured, equipped or trained to run campaigns that way, except perhaps in relatively simple humanitarian operations such as sending DARTs to disaster zones. [40] That level of integration will not be possible without an international policy and an interdepartmental committee that is responsible and accountable. The CAF could be the promoter and leader in this area, especially where the required expeditionary equipment and training are concerned. France is an example. In a recent article, Michael Shurkin, a senior political scientist at the RAND Corporation, convincingly describes that nation's progress, contrasting the French expeditionary approach with the U.S.'s

GENERAL RICK
HILLIER

A SOLDIER
FIRST

BULLETS,
BUREAUCRATS
AND THE
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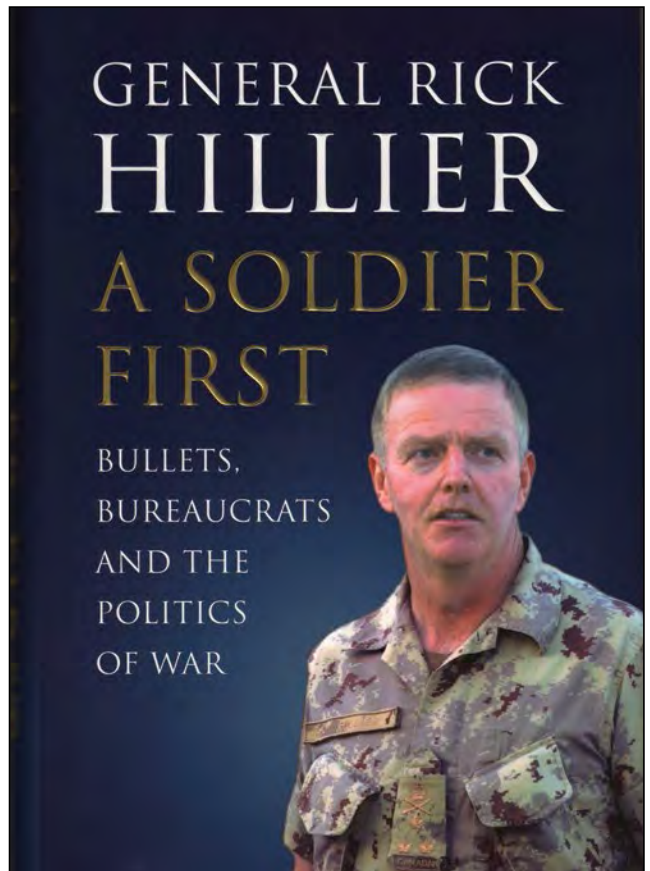
more traditional approach.[41] However, France's situation is not as favourable as Canada's, and Canada should seize the opportunity to act. In addition, the idea of specializing and adopting a niche role, as we have described in this article, dovetails very well with the concept of "smart defence" proposed by NATO Headquarters.[42] For that reason, it should be taken seriously by our political decision-makers, if Canada truly wants to become a leader in the international community.

Critics of such an approach will undoubtedly say that this method is not part of Canadian culture, and that it would therefore be very difficult to implement, since it would reduce the resources available for ensuring Canadian sovereignty. But we have already taken a step in that direction by ratifying the NORAD treaty. Our CF18s play a niche role as the first interception force, while the United States handles subsequent interceptions and counterattacks with its fleet of bombers (aircraft that Canada does not possess). There is already a precedent for a niche role, and our territorial sovereignty has not suffered from it in the least.

Others will say that budget allocations and the ministers' accountability do not currently lend themselves to pan-governmental operations. That is a valid argument. However, an inter-departmental committee led by the Prime Minister could easily fill that gap by ensuring that all intervention decisions would be made by the highest executive level of government.

> **"Any new approach inevitably brings its share of challenges. However, the facts set out here justify taking a new path."**

Lastly, many will say that the geographic structure of the CAF is an incontrovertible fact of Canadian political reality. That is also true. However, this article does not advocate closing bases, but rather, modifying the mandate of the higher headquarters, especially the *regional* headquarters. Those headquarters would have much to gain if they were given a mandate that was more focused upon expeditionary and pan-governmental operations than it is at present.

Any new approach inevitably brings its share of challenges. However, the facts set out here justify taking a new path. The government has asked for it, and the full review of Canada's defence policy opens the door wide. The time is right to seize the opportunity.

Conclusion

The purpose of this article was to reconcile expectations of the CAF and its role with the political commitment and budgets required to ensure the security of Canada's national interests. We took into consideration today's economic and geopolitical context and came to the conclusion that the time has come for DND to advocate for Canada to make a more active commitment on the world stage through its new defence policy. In doing so, Canada should turn away from traditional "fire and forget" missions in favour of a strong role in pan-governmental expeditionary stabilization. This niche is one that very few countries can fill.

DND photo by Corporal Peter Ford

Becoming the pan-governmental expeditionary stabilization team for the international community would attract the recognition that governments have always wanted to obtain through the CAF. The Canadian government could then affirm that "Canada is *really* back." This unifying project would undoubtedly revive the international community's former admiration for Canada. A commitment of this kind on the part of the Government of Canada would also encourage greater interdepartmental cooperation. Lastly, this "Canadian method of intervention" would also have the advantage of aligning CAF budgets with tangible strategic *results*, rather than *outputs*, as is currently the case. Canada could then say it is a country capable of running campaigns in the service of world peace and stability, which would contribute directly to the protection of its own national interests. From an *international strategy* to *tactical actions*: that is how Canada could run campaigns.

CMJ

NOTES

1. Carl von Clausewitz, On War, translated and edited by Michael Howard and Peter Paret (New Jersey: Princeton, 1976), p. 579.

2. In this article, "international policy" encompasses defence policy, foreign policy, and security policy. See Janice Gross Stein and Eugene Lang, The Unexpected War: Canada in Kandahar (Toronto: Viking Canada, 2007), p. 139.

3. Expression used in this article in the same sense as "on operations."

4. The expression "military campaign" refers to the entire range of operations and activities carried out to achieve strategic objectives. In this article, the expression "run a campaign" is used in a broader sense. It encompasses some activities that are non-military but still governmental, including but not limited to diplomacy, development, humanitarian aid, and the training of police forces.

5. Jonathan Vance, "Tactics Without Strategy," Chapter 8 in The Operational Art: Canadian Perspectives, Allan English, Daniel Gosselin, Howard Coombs and Laurence M. Hickey (eds.), (Kingston, ON: CDA Press, 2005), p. 273.

6. Desmond Morton, A Military History of Canada, 5th edition. (Toronto: McClelland and Stewart, 2007), p. xi.

7. North American Aerospace Defence Command.

8. David McDonough and Tony Battista, "Fortress Canada: How much of a military do we really need? In iPolitics, 27 April 2016, at http://ipolitics.ca/2016/04/27/fortress-canada-how-much-of-a-military-do-we-really-need.

9. James Eayrs, "Military Policy and Middle Power: The Canadian Experience," in *Canada's Role as a Middle Power,* J. King Gordon (ed.), (Toronto: Canadian Institute of International Affairs, 1965), p. 84.

10. Joel J. Sokolsky, "Realism Canadian Style: National Security Policy and the Chrétien Legacy," in *Policy Matters* 5, No. 2, June 2004, p. 3.

11. Jonathan Vance, p. 273.

12. *Ibid.*, p. 289; and Bill Graham, *The Call of the World* (Vancouver: UBC Press, 2016), p. 361.

13. Christian Leuprecht and Joel Sokolsky, "Defense Policy "Walmart Style": Canadian Lessons in 'Not-So-Grand' Grand Strategy," in *Armed Forces and Society*, July 2014, p. 544.

14. See the discussion on this theme in David P. Auerswald and Stephen M. Saideman, *NATO in Afghanistan: Fighting Together, Fighting Alone* (Princeton, NJ: Princeton University Press, 2014).

15. Joe Clark, *How We Lead: Canada in a Century of Change* (Toronto: Random House, 2013), Chapter 9.

16. David G. Haglund and Stéphane Roussel, "Is the democratic alliance a ticket to (free) ride? Canada's 'imperial commitments' from the interwar period to the present," in *Journal of Transatlantic Studies* 5, No. 1, p. 11.

17. Roland Paris, "Is Canada Pulling Its Weight in NATO?" in *Center for International Policies Studies* (blog), at http://www.cips-cepi.ca/2014/05/09/is-canada-pulling-its-weight-in-nato/.

18. Philippe Legassé and Paul Robinson, *Reviving Realism in the Canadian Defence Debate* (Kingston, ON: Queen's University Press, 2008), p. 57.

19. Term used in contrast to more complex operations that require the achievement of specific, concrete strategic objectives in order to meet the government's political expectations. They are small-scale, low-risk missions.

20. Bob Rae, *What Happened to Politics?* (Toronto: Simon & Schuster, 2015), p. 118; and Tami Davis Biddle, *Strategy and Grand Strategy: What Students and Practitioners Need to Know* (Carlisle, PA: US Army War College Press, 2015), p. 59.

21. Barack Obama, Remarks by the President at the United States Military Academy Commencement Ceremony. West Point, NY: U.S. Military Academy–West Point, 2014, at https://www.whitehouse.gov/the-press-office/2014/05/28/remarks-president-united-states-military-academy-commencement-ceremony.

22. Minister of National Defence Mandate Letter, in Office of the Prime Minister, *Ministerial Mandate Letters* (Ottawa: Canada Communication Group, 2016), at http://pm.gc.ca/eng/minister-national-defence-mandate-letter.

23. Joe Clark, p. 33.

24. *Ibid.*, p. 159.

25. Roy Rempel, "Mr. Trudeau's Touchy-Feely Approach to War," in *iPolitics*, 9 February 2016, at http://ipolitics.ca/2016/02/09/mr-trudeaus-touchy-feely-approach-to-war/.

26. Hugh Segal, *Two Freedoms* (Toronto: Dundurn, 2015), Chapter 4.

27. Former U.S. Secretary of State Henry Kissinger wrote in 2014 that "in only one of the five wars America fought after World War II (Korea, Vietnam, the first Gulf War, Iraq, and Afghanistan), the first Gulf War under President George H. W. Bush, did America achieve the goals it had put forward for entering it .…" The quote clearly demonstrates the inadequacy of military power alone. Henry Kissinger, *World Order* (New York: Penguin, 2014), p. 328.

28. The senator uses two of the four freedoms identified by U.S. President Franklin D. Roosevelt in a 1941 address to the nation. Hugh Segal, *Two Freedoms* (Toronto: Dundurn, 2015), Chapter 1.

29. *Ibid.,* Chapter 4.

30. Wesley K. Clark, *Don't Wait for the Next War* (New York: PublicAffairs, 2014), p. 179; and Peter Langille, "Re-engaging Canada in United Nations Peace Operations," *Policy Options = Options politiques*, 10 August 2016, at http://policyoptions.irpp.org/magazines/august-2016/re-engaging-canada-in-united-nations-peace-operations/.

31. Term used in contrast to very simple or very short-term tactical operations that do not require concrete strategic objectives.

32. Term coined by the author.

33. Minister of National Defence, *Canada First Defence Strategy* (Ottawa: Canada Communication Group, 2007). In the 1970s, Defence also had a separate role as a member of NATO, as noted by James Fergusson, Ph.D, "Time for a New White Paper?" in *On Track*, Autumn 2015, p. 46.

34. David J. Bercuson and J.L. Granatstein, "From Paardeberg to Panjwai: Canadian National Interests in Expeditionary Operations," in *Canada's National Security in the Post 9-11 World*, David S. McDonough (ed.), (Toronto: University of Toronto Press, 2012), p. 193.

35. A "stabilization" force would be designed and equipped to intervene in defence of both freedoms: freedom from fear and freedom from want.

36. Minister of National Defence, *Canada First Defence Strategy* (Ottawa: Canada Communication Group, 2007).

37. The term "expeditionary" is used in this article to describe the projection of a self-sustaining force using Canada's own strategic transportation capability. Expeditionary forces can be deployed in Canada as well as abroad. Therefore, the term "expeditionary" should not be associated only with foreign deployments.

38. Rick Hillier, *A Soldier First: Bullets, Bureaucrats and the Politics of War* (Toronto: Harper Collins, 2009), p. 155.

39. Method recommended by the Treasury Board of Canada at http://www.tbs-sct.gc.ca/psm-fpfm/learning-apprentissage/ptm-grt/pmc-dgr/smart-fra.asp. The acronym SMART stands for Specific, Measurable, Attainable, Relevant and Trackable/Time-bound.

40. DARTs: Disaster Assistance Response Teams.

41. Michael Shurkin, "What It Means to Be Expeditionary: A Look at the French Army in Africa," in *Joint Force Quarterly*, No. 82, July 2016, at http://ndupress.ndu.edu/JFQ/Joint-Force-Quarterly-82/Article/793271/what-it-means-to-be-expeditionary-a-look-at-the-french-army-in-africa/.

42. Peter Langille, "Re-engaging Canada in United Nations Peace Operations," in *Policy Options = Options politiques*, 10 August 2016, at http://policyoptions.irpp.org/fr/magazines/aout-2016/re-engaging-canada-in-united-nations-peace-operations/.

Personnel Recovery experts congregate in Kandahar, Afghanistan at Headquarters International Security Assistance Force, April 2009.

Simple Changes, Strategic Gain: The Case for Personnel Recovery in Canada

by James Pierotti

Major James Pierotti, CD, MA, *is an Air Combat Systems Officer currently posted to the Canadian Forces Aerospace Warfare Centre. He has five tours within the SAR community, either flying the CC-130* Hercules *in the SAR role or within a Joint Rescue Coordination Centre (JRCC). He has operational experience as the Chief of Combat Rescue in Kabul, Afghanistan, September 2008 to April 2009, with the International Security Assistance Force. He commanded JRCC Victoria from July 2009 to July 2012. His earlier experience was in tactical airlift, on the CC-130* Hercules*, and Electronic Warfare Officer experience on the CT-133* Silver Star.

Introduction

When an aircraft crashes on Canadian soil, or a vessel sinks in Canada's ocean areas or the Great Lakes, there are Canadian military personnel who will get in their aircraft or helicopter and provide assistance despite some of the worst weather conditions imaginable.

The actions of these personnel are called Search and Rescue (SAR), which is a well-known function of the Royal Canadian Air Force (RCAF) that rescues Canadians on a daily basis. SAR, however, is but one aspect of a larger capability called Personnel Recovery that uses aircraft and helicopters, not just in a domestic environment, but also in a deployed and foreign combat environment.

Apart from the ongoing domestic SAR capability provided by most Western nations, organizations have been set up in large coalition military campaigns to deliver this rescue service to friendly troops in combat operations. The North Atlantic Treaty Organization (NATO) and the United States established recent examples of this capability in Afghanistan after 2001, which saved the lives of hundreds of soldiers.[1] Rescue activity in Afghanistan was important to Canada due to the Canadian Armed Forces' (CAF) twelve-year involvement, starting in 2001, with an initial personnel commitment and "…as many as 40,000 more rotating through different campaigns, including the five-year combat mission in Kandahar."[2]

A CH-149 *Cormorant* helicopter during a joint Search and Rescue exercise in Iceland, 12 February 2016

As large as the Canadian contribution was to Afghanistan, the rescue expertise contribution from Canada included just one air force officer position, and no other part of the robust domestic SAR capability provided by the RCAF.[3] If Canadian personnel went missing in Afghanistan during the campaign, Canada could have reacted to time-sensitive rescue missions with Special Operations Forces (SOF), if such forces were present and available in the country at the time, but not with any other element of the CAF. Therefore, why is Canada unable to offer dedicated military rescue resources in foreign and hostile situations when there is a fully effective domestic SAR capability provided by military forces?

The aim of this article is to expose the very limited Personnel Recovery (PR) policy in Canada by comparing it to the policies and capabilities of our allies. First, PR will be better defined. Second, a history of PR focusing on the United States will be provided to show that a PR motto of "leave no one behind" is embedded in the American concept of foreign combat operations, and that they expect their allies to assist in their "no-fail mission" of personnel rescue.[4] Third, recent PR developments in both NATO and the European Defence Agency will be reviewed in order to demonstrate the growing international understanding of the requirement to support the US PR system. Finally, the history and state of Canadian PR will be outlined, and small changes will be identified that could provide the CAF a smooth integration into the PR organization of any future coalition. It will be argued that Canada requires additional PR policy and training in all branches of the CAF to better integrate with coalition partners for future combat operations.

A Description of Personnel Recovery

PR describes the spectrum of rescue, from SAR services in a domestic environment, to combat SAR in a foreign

> **"PR describes the spectrum of rescue, from SAR services in a domestic environment, to combat SAR in a foreign environment, to hostage recovery in any hostile environment."**

environment, to hostage recovery in any hostile environment.[5] A deployed PR organization receives a military version of a missing person report from internal military units, coordinates an investigation, and then sends search and rescue resources to respond, based upon the nation's or coalition's detailed methods for conducting rescue warfare.[6] The reports can result from aircraft shot down, personnel taken hostage, or any situation where Coalition forces cannot account for all personnel. When all Coalition personnel in a campaign are aware of how this system works, and then report their missing in a timely fashion, a modern PR organization prevents an avoidable loss of life within an area of operations.[7]

In simple terms, a domestic PR system relies upon any report from the public to initiate a SAR investigation and subsequent response, if needed, from dedicated national resources assigned to the SAR mandate. This type of response takes place with low/no risk from hostile forces, and is well established with policy, personnel, and equipment.[8] A NATO or US forces deployed PR system is formed in a hostile environment, and it requires knowledgeable personnel in the field who know when to report a missing person situation, coordinators within headquarters who can investigate and react to reports, and specific resources from national armed forces, such as combat SAR aircraft or SOF units, that can respond to rescue missions. This type of rescue takes place with considerable risk from hostile forces, so the personnel in need of rescue must be trained in how to communicate and respond to rescue aircrew.[9]

Within a hostile area of operations, most PR missions are termed combat SAR, due to the need to protect the rescue effort with weapons. A typical combat SAR mission in a theatre of operations is initiated for a person surviving an aircraft crash. If the crash is close to friendly military units, those units can be ordered to assist the downed aircrew. If the crash is far from
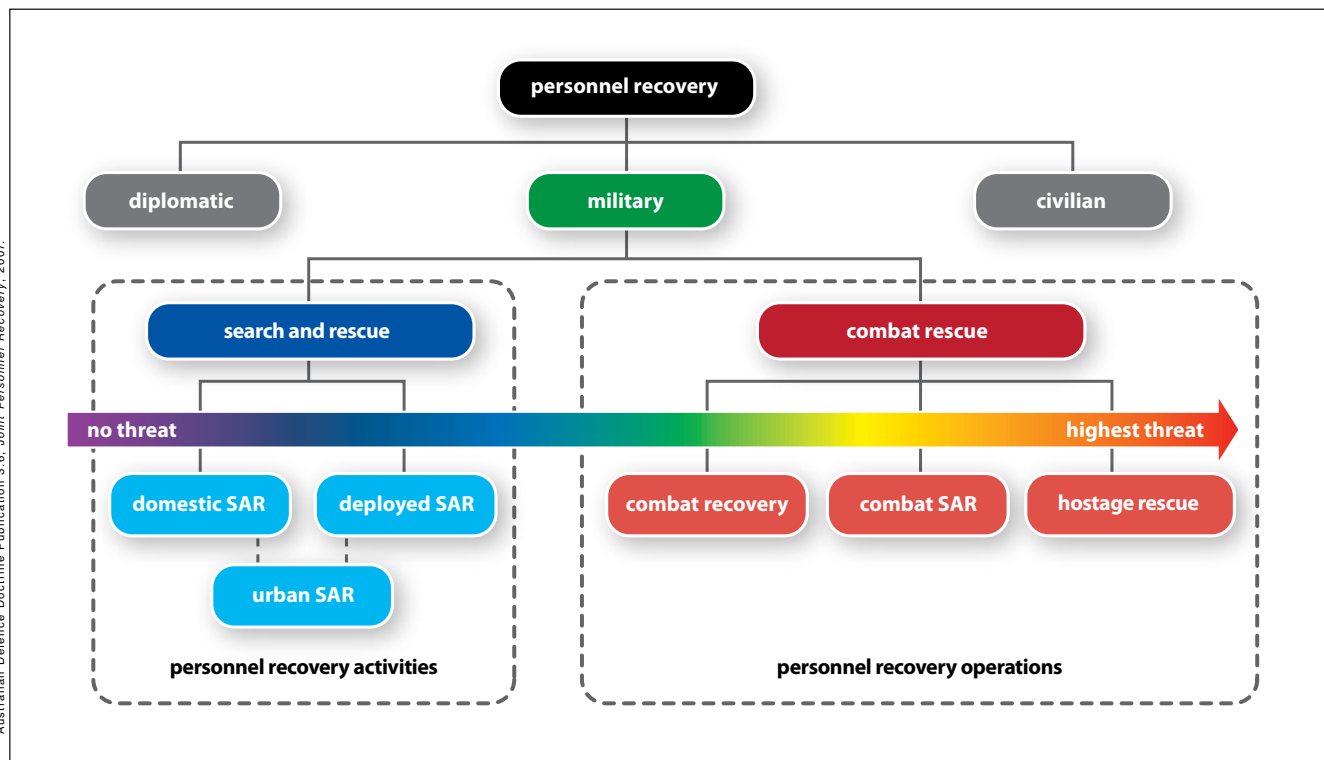
The Personnel Recovery Spectrum

friendly military units, a mission will often use a fixed wing aircraft to conduct the search, and then potentially drop rescue personnel by parachute to secure the area around the aircrew. Then, a helicopter will pick up the aircrew and the rescue personnel and bring them all to safety. As this part of the mission can be quite dangerous if enemy forces are nearby, other aircraft will always be tasked to provide armed and airborne support around the rescue.[10] The popular war movies *Bat 21* (1988) and *Black Hawk Down* (2001) provide an illustration of the basic elements and risks that are involved in the American military's 'leave no one behind' philosophy.

More specifically, PR is "the sum of military, diplomatic, and civil efforts to recover and reintegrate isolated personnel and/or recover persons in distress."[11] An "Isolated person" is simply the military's way to describe anyone who has become separated from their unit and needs to survive until help arrives.[12] These concepts are written into NATO and American military policy along with detailed procedures to ensure that all personnel involved in combat operations are aware of rescue protocols. Rescues are initiated by PR Coordinators, trained personnel who work in Joint Personnel Recovery Centres (JPRC) in a combat theatre, and they react to indications of an isolated person with an appropriate allocation of resources.[13] These Coordinators often come from a domestic SAR background, but they are given additional specialty training to operate within the military combat environment.[14] Clear policies, specifically trained personnel, and dedicated rescue aircraft all form an effective rescue organization of any type, but these components are critically important in the dangerous world of combat rescue.

PR History

The beginnings of combat rescue organizations are found in the Great War. Both British and German forces had lifeboat services for recovering sailors from enemy action or maritime accidents, and the British went so far as to use Boy Scouts for observation of the coast to enhance reporting of incidents that needed rescue resources.[15] The British system saved thousands of sailors and 22 aviators downed in the ocean, and these actions foreshadowed a future increased need to recover personnel from all branches of a military.[16] Although the British version was effective and the capability considered important at the time, "…the war ended with nary a mention of the need" for combat rescue.[17]

This "need" became immediately apparent at the beginning of the Second World War. British and German aircrews were shot down in the English Channel during the Battle of Britain, and neither side had the time to train replacement pilots quickly enough. Aviators were desperately needed back in the cockpit to support the air war effort, and forward-thinking Germans had an effective PR organization in place prior to the battle with seaplanes, lifeboats, and even large, buoy-type floats anchored in the Channel with appropriate survival equipment stowed onboard.[18] The British followed suit quickly, minus the buoy-type floats, so they could recover experienced pilots and maintain their desperate air defence.[19] The Americans realized the benefits of this effort, and they built a similar system of aircraft-based rescue squadrons throughout the South Pacific, starting in 1943.[20] The final statistics of the war would later indicate that combat rescue worldwide had saved 13,269 lives, which confirmed the positive impressions that combat rescue had made on leadership and the public throughout the war.[21]

A Supermarine *Walrus* air/sea rescue aircraft used to recover downed airmen during the Second World War

The Second World War dramatically changed national perceptions of rescue requirements from *ad hoc* affairs to a formal international mandate to improve aviation and maritime transportation safety.[22] There was no question in the post-war world that rescue systems were needed, and international rescue was subsequently regulated for civil aviation in 1946, and for maritime requirements in 1948.[23] Domestic rescue efforts took primacy in post-war developments as it had been hoped that large-scale warfare was over. The military component of rescue systems was radically downsized as a result, and thus began the cyclical 'boom and bust' of combat rescue developments.[24]

Despite the perceived reduction in military rescue needs, the Korean War fully demonstrated PR's continued importance. At the beginning of the war in 1950, the US had two rescue squadrons in Korea to support ground combat operations, but they were "…a hodgepodge collection of obsolete aircraft and airframes ill-suited for the sudden task at hand," and insufficient to the number of rescue missions required.[25] The US rebuilt a highly capable rescue organization during this war, and introduced the helicopter into the rescue units as the perfect tool to quickly recover people on the ground from behind enemy lines. The system developed by the US allowed simultaneous medical evacuation of injured ground combat troops, and "…approximately 90 per cent of all flying personnel downed behind enemy lines [were] picked up by U.S. Air Force [USAF] helicopters."[26] Subsequently, combat rescue was written into American policy.

Unfortunately, a combat rescue system was difficult to justify in times of peace, and, shortly after the Korean War, the organization once again languished until the Vietnam War. At the start of hostilities in Vietnam, the US again found itself with obsolete equipment for an essential rescue service. Again, a combat rescue capability was quickly rebuilt, and this time it evolved into the best PR system so far seen in combat, at a time now described as the "golden age" of rescue.[27] Although it is difficult to say for certain how many lives were saved in Vietnam by the American combat rescue organization, one low estimate states 1,450 personnel.[28] At the end of the Vietnam War, the Americans were convinced that they needed a PR capability at the beginning of any future operation so they did not have to focus on rebuilding a capability during a war. Perhaps unsurprisingly, the literature on combat rescue, then and now, has been dominated by the American experience outlining the requirement to protect expensive aircrew.[29]

The coalition effort in *Desert Storm*, the 1991 war in Iraq, was the first major use of American rescue assets, although aged, to provide a robust combat rescue capability from the beginning of a combat operation. In an interesting twist, the war was so well planned and executed that only "…eighteen men and one woman became prisoners of war as a result of aircraft shoot-downs.[30] Seven combat search and rescue missions were launched [for persons other than aircrew], resulting in three saves."[31] The JPRC logs reveal that only three personnel were saved in the Gulf War conflict, compared to "the rescue of 3,883 personnel from all

US Defense imagery, photo DF-ST-92-03743/Russ Pollanen USAF

A USAF Sikorsky HH-3E *Jolly Green Giant* rescue helicopter of the type used extensively in Vietnam

US DoD 150729-A-VO006-622

A USAF UH-60 *Blackhawk* helicopter

varieties of 'at risk' situations during [Vietnam]."[32] Although the duration of those two wars differed greatly, the usage of the rescue resources in the Iraq War occurred on a weekly rather than a daily basis. Thus, the 1991 war revealed a dilemma; maintaining a combat rescue service is expensive and it may not see much use, even in times of war. This war did not reinforce the importance of PR.

Two years after *Desert Storm*, the US was involved in a dangerous mission in Somalia. The Americans had one helicopter to support a US Army Ranger raid on 3 October 1993, which *appeared* sufficient, based upon the Gulf War experience, but the raid turned into the horrific "Battle for Mogadishu."[33] The one available helicopter, using resources internal to the organization and not the USAF specific PR capability, turned out to be wholly insufficient. It was unable to extract personnel from two helicopters shot down in quick succession by rocket propelled grenades, and 18 American servicemen were killed in action during the efforts to extract all the dead and injured.[34]

There was an immediate and significant impact on US foreign policy as a result of the loss of American life in this event.[35] American military PR policy was changed as well due to the demonstrated importance of combat rescue to all US servicepersons. Combat rescue was no longer a service primarily for downed aviators; it became a necessary service for all military men and women in conflict areas. Therefore, the Somalia experience led the Americans to ensure that future military campaigns had a robust PR capability ready for any scenario. PR policy had long been in place, but the events of the early-1990s convinced the Americans that a robust combat rescue capability was fundamental to future success in any military campaign.

As a result, American-led operations in Afghanistan in 2001, and then in Iraq in 2003, were equipped with modern and effective PR helicopters ready for rescue missions at the onset of operations, contrary to the aged helicopters in use at the beginning of the Vietnam War and the Gulf War. The systems in place proved immediately successful, and this precipitated a large demand for helicopter rescue resources for all American military operations that lasted years.[36]

The USAF conducted its first "combat save" since the Vietnam era in Afghanistan on 17 January 2002. Following that rescue, there were nine combat saves in the first three years of Operation *Iraqi Freedom*.[37] Therefore, in the first decade of the new millennium, the Americans had arrived at a PR system that was kept updated between conflicts and ready for combat rescues in any new conflict, regardless of how much or little that system was used during a campaign.

A decade of heavy operational use of combat rescue assets reduced USAF helicopter availability to support a 2011 campaign in Libya, but the reduction was overcome by assistance from other branches of the American military in a type of operational synergy called "joint." In the Libya operation, the aircrews of a crashed F-15 *Eagle* were saved by a PR mission, but it was an *ad hoc* rescue by US Marine resources from a nearby task group, rather than the normal USAF combat rescue organization. American researchers were later concerned that the two aviators had been exposed to capture, due to the lack of USAF PR resources. The argument was

that this crash "…could have significantly altered Americans' support of the Libyan operations, as happened almost 18 years earlier in Somalia."[38] The researchers made a case for increased numbers of combat rescue aircrew and aircraft to ensure an effective PR capability for all future military campaigns.

The risk identified by the researchers may have been a touch overblown. In the Libya campaign, there were dedicated coordination personnel in the headquarters to investigate, and resources were identified daily and made available to respond to missions. In an era when the resource requirements exceeded the resources available, the PR system had adjusted to the "joint" use of resources from any service. As will be discussed in the NATO system, this concept *can*, and *does*, easily extend beyond one nation to use resources from multiple nations in one system, which is called "combined." Therefore, PR was no longer just an air force responsibility, but it had become a joint or combined effort for times when insufficient USAF PR-specific resources were available. The inescapable fact was that PR was deemed essential by the American military, and expectations from allies were rapidly rising to assist with strained American rescue assets.

As a direct result of all the operational combat rescue activity, the US expanded PR policy to include both tactical manuals in the individual military services and policy approved by the US House of Representatives. Therefore, PR policy has since become entrenched in US foreign policy and military strategy. As an example, the US government in 2005 was concerned with respect to the safety of the civilian contractors on the battlefield, so it introduced a bill to include them in the planning for theatre-level combat rescue support.[39] The United States Air Force then added civilian contractors to the definition of the term "isolated person," again in 2005, and formalized the shift away from the combat rescue of just military personnel.[40] The Army introduced a complete manual on PR in 2014, which provided its leaders with operational and planning tools to *ask for*, *receive*, and *support* PR operations.[41] This manual also provided the necessary training for all soldiers to understand and interact correctly with rescue aircrew in a combat environment. Also in 2014, the US government proved its continued commitment to the combat rescue mission by approving a $7.9 billion contract for 112 new PR helicopters starting in 2019, ensuring the equipment needed for this capability does not languish between conflicts over the next twenty years or more.[42] The Americans take combat rescue very seriously.

PR in NATO and the European Union

The Europeans took notice of the American PR commitment. By 2003, it was clear that the new policy of PR had replaced that of narrowly-defined combat rescue in American operations, so NATO took steps to incorporate the American PR concept into the alliance documentation, culminating in *AJP-3.3.9 (SD-2) NATO Personnel Recovery*, issued in 2005.[43] The NATO International Security Assistance Force (ISAF) in Afghanistan confirmed the need and importance of PR, which further reinforced the integration of PR policy by 2007.[44] NATO PR policy has been further refined into robust tactics, techniques and procedures as a result of the American lead and insistence that allies share the operational rescue workload.

Although NATO was duplicating American policy into its own, amalgamation of the two separate organizations was not immediate. In 2008, the NATO PR system for the International Security Assistance Force (ISAF) and the American PR system in Afghanistan were separate, and the only contact between the staff of both organizations was conducted over the telephone. Operationally, this complicated the coordination of rescues, because all information received on the NATO computer network in Kabul had to be re-typed into another network to get the necessary information to the American specialists in Bagram who needed it, and vice versa, which wasted precious time when personnel went missing.[45] In that same year, the Americans had helicopter rescue assets in Bagram, while ISAF had access to British assets in Bastion and Spanish assets in Herat. This meant that rescue helicopters were in three separate locations spread out somewhat evenly across the country for easy access to personnel operating in all corners of the country, but there was no easy coordination between organizations to ensure timely rescue success. With the announcement of a major American surge of combat personnel in 2009, common sense prevailed, and the two PR systems were merged in ISAF HQ.[46] This amalgamation was repeated for the Libya campaign, and it appears likely for future campaigns. It was not just NATO that had incorporated PR into policy and operations. The United Nations (UN) deployed one combat SAR helicopter and a PR commando group into the Congo region for the UN mission that started there in 2003.[47] The threat to UN cargo aircraft included hand-held surface-to-air missiles, which put UN-tasked aircrew at risk of being shot down, making it necessary for the UN to respond with a PR capability to assure nations that it could react to any rescue situation.[48] Other groups and nations followed the UN example.

The European Air Group, a consortium of seven European air forces working together to improve capability through interoperability, decided in 2013 to create a European PR Centre to demonstrate its understanding of PR's importance.[49] This JPRC became operational in Poggio Renatico, Italy, in July 2015, and is intended as both an operational centre for European countries and a PR point of contact for NATO.[50] Great Britain, an important ally of both Canada and the US, has had a joint PR policy in place since 2003, ensuring that all its military forces are aware of the operational planning and procedures needed to affect combat rescue missions.[51]

The European Air Group and NATO now offer courses for coordination personnel within the JPRCs and for specialty survival training. As well, they have incorporated lessons learned analysis to enhance future capability and improve interoperability.[52] All major Canadian partners in times of conflict, therefore, have advanced PR capabilities.

PR in Canada

Unlike NATO, the Americans, the British, and the Europeans, Canada does not currently have a joint PR policy.[53] Canadian exposure to non-domestic PR has only occurred since 2006, in Afghanistan, and the lessons learned from that theatre of operations are many, so it is understandable

> **"Although NATO was duplicating American policy into its own, amalgamation of the two separate organizations was not immediate."**

that it is taking some time to develop new policies. However, since the initial exposure, CAF has been involved in operations in Afghanistan, Libya, and now Iraq, all of which have had PR systems within the coalitions. National Defence Headquarters is clearly aware that such policy is needed, as the guiding document for military policy, 2011's *Canadian Military Doctrine*, identifies a supporting document called *Canadian Forces Joint Publication 3.7 Joint Personnel Recovery*.[54] As of May 2016, however, the latter document remained in draft form.[55] Without an overall policy for the military, it is left to the navy, army and air force to incorporate PR policy into each branch. It is taking a very long time to incorporate PR knowledge and training into the CAF.

The Royal Canadian Air Force is the furthest ahead among the three branches of the CAF, with PR policy described in an operational doctrine document published in 2011.[56] The new PR policy has not yet been fully incorporated into the operational manuals, but some of the detailed procedures for rescues from a combat environment are already part of aircrew training.[57] While the training is for aircrew only, and not for all personnel of the RCAF, training aircrew in PR means that the personnel of the RCAF most at risk of becoming isolated in a hostile deployed environment have enough knowledge to operate in a coalition PR environment.

It is more difficult to comment upon the current status of PR policy in the Royal Canadian Navy (RCN), because it relies heavily upon NATO manuals.[58] As the NATO manuals contain material on PR, it is probable that the Navy is aware of PR policy, even if it is not fully integrated into its training. It is much easier to comment upon the Canadian Army PR policy, or rather lack thereof, as it has an easily searchable library within the military computer network, and there was no mention of PR anywhere.[59] Clearly, the preponderance of PR concepts among all Canada's traditional allies strongly suggests that more attention is needed to develop joint PR policy in Canada. The risk that the CAF takes without such joint policy is that soldiers, in particular, will not have the training or knowledge of how allied forces can rescue them if they become isolated in a future crisis.

To understand why combat rescue policy in Canada is slow to develop, it helps to know that the RCAF has not had aircrew shot down in a hostile area, and in need of rescue, since the Second World War. Indeed, the closest capability to a PR system that Canada developed during that conflict was an air-sea rescue service, similar to the one developed in Britain for aviators shot down in the Channel, but the Canadian version was far from most combat activity, and it was developed more for domestic rescues, due to the lack of any other Canadian domestic rescue service.[60] After the war, Canada committed entirely to the domestic rescue capability as part of international expectations for a civil aviation and maritime rescue service. The RCAF was given the mandate for SAR throughout Canada in 1947, originally for aviation emergencies, but in 1950, the rescue responsibility was increased to include maritime SAR.[61] Today, it is a highly regarded system in the low/no risk end of the PR spectrum.

At the medium and high-risk end of the PR spectrum, not even the Canadian SOF experience included rescue during the Second World War.[62] Since that war, "…in the field of hostage rescue, Canadian efforts were *ad hoc* and situation-specific."[63] In the most famous example, a UN mission in the Congo in 1964 took a dramatic turn when insurgents took missionaries and aid workers hostage, so the senior Canadian commander, Brigadier-General Jacques Dextraze, formed a composite Canadian-Nigerian-Swedish airmobile rescue force which saved at least 100 people.[64] This is the only large-scale combat rescue event in Canadian history between the Second World War and the Afghanistan campaigns, although Canadian military experience in domestic SAR continued over the decades following the Second World War. The rest of the PR spectrum of rescue, where hostile activity may be encountered, remained an activity for other militaries. Therefore, there has been little need for any Canadian combat rescue policy until recently.

Recent CAF appreciation of its role in combat rescue operations appears to be rooted in the 1990s. Canada had an incident in 1994 in which Canadian soldiers of the United Nations Protection Force in Bosnia were held hostage.[65] This incident drew the full attention of the Canadian House of Commons and media, and demonstrated the extent to which Western nations can become concerned when their citizens are held captive.[66] An *ad hoc* rescue force using specially-trained Canadian soldiers was created for this incident, but it was not used.[67] This was the beginning of Canadian consideration of the use of SOF during international cases in which Canadians are held hostage.[68]

DND/CFJIC photo UNC63-172-1

Brigadier Jacques Dextraze (centre) arrives in the Congo in 1963.

DND photo TN11-2016-0804-081 by Corporal Ryan Moulton

A CC-130J *Hercules* lands at CFB Alert, 4 October 2016.

Today, military force may be needed to conduct the hostage rescue mission because the Canadian government's "…approach to kidnapping respects firm principles: no policy changes, no exchanges, no immunity from prosecution and no ransom payments."[69] Hostage situations outside Canada, therefore, leave few options for the government other than to employ force. When force is used, the lead agency is not DND, but Global Affairs Canada (GAC) and surprisingly, foreign hostage situations do occur fairly regularly.[70] Since 2004, 13 Canadians have been taken hostage, and a joint SOF mission recovered one hostage from Iraq.[71] The SOF have international hostage rescue as part of their mission statement, and, when a crisis develops, SOF work directly with GAC. Combined with the low number of rescue missions since the Second World War, the direct relationship between Canadian SOF and GAC has obscured the need for formal joint PR policy in the CAF.[72]

The RCAF's PR documentation of 2011 acknowledges the Canadian combat rescue limitations, and states "…few countries possess the capability to conduct the full spectrum of combat rescue operations." Arguably, this statement suggests that the creators of the policy did not envision a need for further discussion of the middle ground of PR between domestic SAR and hostage recovery.[73] One can perhaps understand this pragmatic point of view in light of the difficulties Canada has had over the last few years in maintaining even the well-established domestic SAR capability. The Spring

"At the medium and high-risk end of the PR spectrum, not even the Canadian SOF experience included rescue during the Second World War."

2013 Report of the Auditor General highlighted that the Department of National Defence had not implemented recommendations to increase the number of SAR crews per squadron, nor had it been able to maintain SAR aircraft at a level sufficient to ensure a continuous rescue response at each of the current SAR locations.[74] It further states that Canada requires new fixed wing SAR aircraft and additional SAR helicopters to continue to provide the level of service currently expected by the government and the public.[75] One might conclude that if the RCAF struggles with its assigned *domestic* SAR mandate, it could then become difficult to summon the effort to write policy and detailed procedures to cover the whole spectrum of PR if there is a concern that the effort could require more rescue resources.

This article is not the first attempt by a Canadian military academic to argue for increased PR policy, nor is it likely to be the last. However, the argument is occasionally expanded beyond policy and training to include the use of RCAF assets to conduct the full range of PR missions in coalition operations.[76] The argument is typically made in the following manner. The C130J *Hercules* in the RCAF inventory is a state-of-the-art aircraft and can be converted to a combat SAR support aircraft. The RCAF's *Chinooks* were delivered in 2013-2014, and are highly capable helicopters that can carry rescue specialists to conduct the combat rescue mission. The *Griffon* helicopters, already in use at RCAF SAR squadrons, can be armed to protect the *Chinooks* during these rescues. Canada could use these aircraft to respond to PR missions in a manner similar

A CH-147F *Chinook*

to the Americans, which would provide a meaningful contribution to operations that could then lessen the demands put on Canada for contributions in other operational roles, such as air superiority fighters or ground combat units. While this Canadian PR solution is not quite as capable as the American purpose-built PR system of helicopters and specialists, it could offer a robust combat rescue capability that could be very supportable by the Canadian public.

The argument comes across as a logical way to employ resources already in the RCAF inventory. However, an important counter-argument is that money, personnel, and equipment are currently insufficient to provide both domestic SAR and deployable combat SAR assets covering the full spectrum of PR. RCAF aircraft have other important roles and responsibilities associated with the defence of Canada, and support to foreign missions that are equally important to PR missions, so the capacity to do everything with the existing numbers of aircraft and aircrew is simply not present.[77] Expanding the tasks of existing SAR units is not *impossible*, as the following example shows, but it is not *practical* for extended operations.

In 2011, the Canadian government was asked by the Jamaican government to support domestic SAR in Jamaica for three months as they reconstituted their Bell 412 (*Griffon*) helicopter fleet.[78]

> **"One can conclude that the use of the SAR community for deployed SAR operations comes with considerable risk to the continued effectiveness of the SAR capability within Canada."**

The RCAF was critically low on SAR-qualified aircrew for the *Griffon* helicopter, the resource requested by the Jamaican government, but they saw this as an opportunity to train additional aircrew from basic flying skills to SAR flying skills.[79] The RCAF had recently brought the *Griffons* back from a long-term deployment in Afghanistan, and it was in the process of bringing the number of SAR qualified aircrews back to the level that had existed before the deployment. There was no formal SAR training program for aircrew in the *Griffon* fleet in Canada, so this opportunity allowed for concentrated *ad hoc* training in Jamaica. The RCAF concluded that the deployment met the aircrew *training* requirements for the RCAF, while it also conducted *operational missions* for the Jamaicans.[80] The whole RCAF SAR community surged for three months to provide the domestic SAR capability in Canada, as well as the deployed operation, but at the same time, this deployment led to more operational rescue crews, and eventually reduced the burden on *Griffon* SAR crews in Canada. This example suggests that the RCAF has the ability to take on commitments beyond the normal domestic SAR mandate, but only for very short time periods and only when specific training goals can be concurrently achieved. One can conclude that the use of the SAR community for deployed SAR operations comes with considerable risk to the continued effectiveness of the SAR capability within Canada.

A Canadian SAR CH-146 *Griffon* manoeuvres through the hills during training near Kingston, Jamaica, 8 October 2011.

From this foregoing example we can see that the potential exists for the SAR community, even when under pressure to maintain basic domestic SAR capability, to take on additional challenges in a deployed environment. The focus, however, must be on the personnel and on the skills they hold, rather than increasing expectations of the RCAF's limited aircraft beyond domestic SAR. It is easier to 'do more with less' when it comes to people rather than airplanes, so if personnel already assigned to domestic SAR simply increase their skill sets into knowledge and experience with deployed PR, then the CAF will maintain a core PR skill set between conflicts that will allow easier integration into any new campaign, combat or domestic.

Maintaining these skills is important because if any future foreign request for SAR services includes any element of the Canadian Army for the specific operational mission, it then becomes a mission outside of domestic SAR expectation and quite firmly into PR policy, where threat levels and coordination with external agencies or military forces need to be considered. For those kinds of missions, joint PR policy and trained PR personnel become essential to that mission's success.

The requirement for PR policy may now be clearer, but one major factor has yet to be discussed. The counter-argument for PR policy in Canada has been suggested as follows: if the RCAF capabilities are focused upon domestic SAR, if the CAF is no longer involved in major combat operations, and if SOF conducts the high-risk hostage rescue missions, then what real need is there for more formal policy? The answer to that question is coordination. It has been established that the most likely combat rescue mission that may require CAF resources is hostage recovery, or

the recovery of aircrew, and that a SOF response would work for Global Affairs Canada, not the military, indicating two separate and possibly unconnected chains of command. This is potentially disastrous, to which experienced personnel from Afghanistan can attest. If a hostage recovery takes place in the same theatre as conventional forces, there must be coordination between SOF and the main coalition in order to avoid two separate operations taking place in the same battle space.[81] The existence of a formal, understood, and practiced CAF PR policy would go far to avoid such eventualities.

Coordination also needs to take place between Canadian formations that need to know *how* and *when* rescue forces would be employed, and the rescue force needs to know that the isolated persons they will recover have been properly trained. RCAF personnel knowledgeable in PR learned this lesson well in Afghanistan, and this coordination can be as simple as having one trained Canadian PR specialist in any given theatre.[82] A cadre of trained personnel can provide this coordination in future conflicts, and training this cadre should not be particularly costly, as Canadian SAR personnel are grounded in military competencies.[83]

In a coalition environment, coordination with the other nations is equally important, and further underscores the need for trained coordination personnel within large Canadian contingents heading into any coalition-led combat operation. This very coordination is recognized and practiced at the tactical level in the ongoing commitment to Op *Impact* against the Islamic State of Iraq and the Levant. A recent news article highlighted a combat SAR training exercise in Kuwait involving Canadian aircrew and the US Army's 34th Combat Aviation Brigade. In this combat rescue exercise,

Canadians were able to practice their PR skills in the event that the Americans would need to rescue them in enemy-controlled territory in Iraq.[84] At present, RCAF crews are aware of the policies and skills they need for their own rescue by other militaries when in hostile territory, but those skills need to be expanded beyond the RCAF to the Canadian Army and the Royal Canadian Navy. All Canadian military personnel need to be aware of PR policy before they arrive in any theatre of operations.

Conclusion

Afghanistan emerges from any discussion on PR as a major turning point. While the US envisaged the need for combat rescue in every conflict since the Second World War, nations that worked with the US in Afghanistan have either seen the value of PR, or feel compelled to support the American example. Duplication of PR organizations in theatre was observed as redundant and wasteful, a situation that was rectified in 2009, and the integration between systems in both Afghanistan and subsequently Libya offers a solid way forward for future rescue integration. The recent PR focus upon training, and the creation of JPRCs in both NATO and in Europe highlight this understanding.

Canada, however, is lacking the PR policy of its allies. Future participation in coalitions would benefit from joint PR policy, both conceptual and practical, at all levels of Canadian military formations. Fortunately, there are indications that the creation of joint policy in Canada has begun, manifested in a draft manual on "Joint Personnel Recovery."[85] In order to hasten PR development, the RCAF should consider the upgrade of some SAR coordination personnel to PR professionals in order to provide an initial deployment capability of personnel that can assist in any new coalition PR organization. The Army should consider policy examples from both Britain and the US that it can leverage to ease the burden of adding new documentation to close the knowledge and training gap. The Navy should investigate the need to visibly incorporate NATO PR regulations into existing practices. Equally important, policy should incorporate a communications process with SOF personnel working outside the Department of National Defence on hostage situations. These small changes *can* and *should* provide a viable basis towards a significant improvement in Canadian PR.RCAF realities provide limits to effective policy. As a prime example, the use of Canadian aircraft for combat rescue missions is counter-productive. The type of aircraft currently in inventory may be suitable, but the numbers of aircraft and the importance of other missions that must be supported do not make combat rescue missions by Canada a viable option at present. Instead, effort should be directed towards training and policy development aimed at coalition interoperability. Policy already exists through the recent PR efforts of NATO, the EU, and the US. Allied policies and experiences should be leveraged, as the militaries of those nations and Canada can expect to work together in future coalitions under a joint PR umbrella. As important as support to allies can be to Canadian interests, development of PR policy has an even deeper rationale. The fundamental reason for improving PR in Canada is to increase the chances of affecting a successful rescue of any Canadian in a hostile environment. The benefits are well worth the relatively small cost this effort will require.

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NOTES

1. This author was part of the NATO PR system in Afghanistan from September 2008 to April 2009, and is aware of the others who held the position over the years described. The statistics available for PR missions are very difficult to quantify as NATO did not keep mission records, but this source provides the US figures for both Iraq and Afghanistan: United States Congressional Serial Set, Serial no. 14956, House Documents, House of Representatives, Proceedings of Wednesday, September 1, 2004, p. 63.

2. Canadian Press, "Canadian Military Involvement in Afghanistan Formally Ends," *CBC News*, 12 March 2014, http://www.cbc.ca/news/world/canadian-military-involvement-in-afghanistan-formally-ends-1.2569162 (accessed 17 April 2015)

3. This author has worked with the RCAF SAR professionals who worked in Afghanistan after the author's deployment in that position in 2008.

4. Lee Pera, Paul D. Miller, and Darrell Whitcomb, "Personnel Recovery: Strategic Importance and Impact," in *Air & Space Power Journal* (November-December 2012), pp. 83-112.

5. Royal Canadian Air Force, *Canadian Forces Aerospace Move Doctrine*, (Astra: Canadian Forces Aerospace Warfare Centre, 2011), p. 40.

6. The actual reporting mechanism within NATO is a form called the PR 11-line report, but it acts in the same way as a missing person's report only with immediate action as military authorities assume the information is accurate. North Atlantic Treaty Organization, *BI-SC Joint Personnel Recovery Joint Operational Guidelines*, 22 February 2011. http://www.eda.europa.eu/docs/procurement/bi-sc_joint_personnel_recovery_joint_opera-tional_guidelines.pdf (accessed 5 May 2015)

7. "The term campaign applies to large-scale, long duration, significant military strategy plan incorporating a series of inter-related military operations or battles forming a distinct part of a larger conflict often called a war," taken from Wikipedia, https://en.wikipedia.org/wiki/Military_campaign (accessed 1 July 2015)

8. Royal Canadian Air Force, *Aerospace Move Doctrine*, pp. 40-41.

9. *Ibid.*

10. United States Air Force, "Personnel Recovery Operations," *Air Force Doctrine Document 3-50*, 1 June 2005, http://fas.org/irp/doddir/usaf/afdd3-50.pdf (accessed 25 March 2015), p. 13.

11. Royal Canadian Air Force, *Aerospace Move Doctrine*, p. 37.

12. Joint Air Power Competence Centre, *Personnel Recovery: That Others May Live to Return with Honour, a Primer*, January 2011, https://nllp.jallc.nato.int/IKS/Sharing%20Public/Personnel%20Recovery.pdf (accessed 25 March 2015), p. 1.

13. Joint Air Power Competence Centre, *Personnel Recovery... Primer*, p. 32. Joint Rescue Coordination Centre (JRCC) is a term used in American doctrine to provide the same functionality, but the NATO term is used here to avoid confusion with Canadian JRCCs that provide only domestic SAR functionality.

14. Both NATO and the USAF offered PR courses to Canadian officers in the 2006-2010 timeframe to provide SAR specialists with the knowledge to effectively coordinate rescue missions in a combat environment.

15. Clayton Evans, *Rescue at Sea: An International History of Lifesaving, Coastal Rescue Craft and Organisations* (London: Conway Maritime Press, 2003), p. 70.

16. *Ibid.*

17. George Galdorisi and Tom Phillips, *Leave No Man Behind: The Saga of Combat Search and Rescue* (Minneapolis: Zenith Press, 2008), p. 18.

18. L.B. Taylor Jr., *That Others May Live: The Aerospace Rescue and Recovery Service* (New York: E.P. Dutton & Co., Inc., 1967), p. 62.

19. *Ibid.*

20. Galdorisi and Phillips, *Leave No Man Behind...*, p. 50.

21. Peter Whittle and Michael Borrisow, *Angels without Wings: The Dramatic inside Stories of the RAF's Search and Rescue Squadrons* (Great Britain: The Angley Book Co. Ltd., 1996), p. 36.

22. The Para Rescue Association of Canada, *That Others May Live: 50 Years of Para Rescue in Canada* (Astra: The Para Rescue Association of Canada, 1994).

23. James Pierotti, "Reluctant to Rescue: The RCAF and the Search and Rescue Mandate, 1942-1954," in *Canadian Nautical Research Society, Argonauta Vol XXXII*, No. 4 (Autumn 2015).

24. Galdorisi and Phillips, *Leave No Man Behind...*, p. 110.

25. *Ibid*, p. 113.

26. Taylor, p. 114.

27. Darrell D. Whitcomb, *Combat Search and Rescue in Desert Storm* (Maxwell AFB: Air University Press, 2006), p. xvi.

28. Galdorisi and Phillips, p. 447.

29. This author has written an unpublished article, " Personnel Recovery Past and Present: A Historiography," that clearly demonstrates the lack of written works on the PR system of any other country after the Second World War.

30. The rescue missions saved USAF, US Army, Saudi Arabian, and British personnel. Whitcomb, p. 258.

31. *Ibid*, p. xvi.

32. *Ibid*, pp. 8, 258.

33. Mark Bowden, *Black Hawk Down: A Story of Modern War* (New York: Penguin Books, 1999), p.337.

34. Walter A. Dorn, *Air Power in UN Operations: Wings for Peace* (United Kingdom: Henry King Limited, 2014), p. 224.

35. Colonel Jason L. Hanover, "Air Force Rescue: A Multirole Force for a Complex World," in *Air & Space Power Journal,* (Fall 2011).

36. *Ibid*, p. 19.

37. Galdorisi and Philips, p. 517.

38. Pera, Miller, and Whitcomb, p. 104.

39. Jeffery F. Addicott, "Contractors on the "Battlefield:" Providing Adequate Protection, Anti-terrorism Training, and Personnel Recovery for Civilian Contractors Accompanying the Military in Combat and Contingency Operations." in *Houston Journal of International Law*, June 2006, p. 323.

40. United States Air Force, "Personnel Recovery Operations," p. 1.

41. United States, Headquarters, Department of the Army, "FM 3-50 Army Personnel Recovery," September 2014, http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/fm3_50.pdf (accessed 25 March 2015); and can be found at http://armypubs.army.mil/Search/ePubsSearch/ePubsSearchForm.aspx

42. Daryl Mayer, "New Combat Rescue Helicopter HH-60W to Perform Personnel Recovery Mission," in *Vertical Magazine*, 29 November 2014, http://www.verticalmag.com/news/article-NewcombatrescuehelicopterHH60Wtoperform-personnelrecoverymiss (accessed 25 March 2015)

43. Joint Air Power Competence Centre, *Personnel Recovery...Primer*, p. 13.

44. *Ibid*, p. 18.

45. This author was the Chief of Combat Rescue in ISAF HQ from September 2008 to April 2009, and was one of the architects of the Combined Personnel Recovery Centre – Afghanistan.

46. The American surge of troops in Afghanistan in 2009 was accompanied by a large increase in Combat SAR capability within the country, but the details remain classified, so a clear source for the magnitude of the deployment was not located.

47. Dorn, p. 245.

48. *Ibid*.

49. European Air Group, *The European Personnel Recovery Centre*, http://www.euroairgroup.org/project/european-personnel-recovery-centre-eprc/ (accessed 25 March 2015).

50. Andrew Drwiega, "Personnel Recovery: The Risk of Cutting 'Insurance' Cover," in *Aviation Today*, 5 January 2015, http://www.aviationtoday.com/the-checklist/Personnel-Recovery-The-Risk-of-Cutting-Insurance-Cover_83820.html#.VRMGoFy4mi4 (accessed 25 March 2015)

51. United Kingdom, Joint Doctrine & Concepts Centre, "Joint Personnel Recovery," *Joint Warfare Publication 3-66*, April 2003, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/43483/JWP366.pdf (accessed 25 March 2015)

52. European Defence Agency, "Successful Personnel Recovery Course Held in Sweden," *News*, 6 March 2015, https://www.eda.europa.eu/info-hub/news/2015/03/06/successful-personnel-recovery-course-held-in-sweden (accessed 25 March 2015). NATO, Analysis & Simulation Centre for Air Operations, courses, updated 17 February 2015, http://www.caspoa.org/index.php/our-courses (accessed 1 April 2015)

53. There has been work completed on overall Canadian PR doctrine by Dr. Allan English, but it has not yet been published outside of the Canadian Defence Academy.

54. Canada, Department of National Defence, B-GJ-005-000/FP-001, CFJP-01, *Canadian Military Doctrine* (Ottawa, ON: Joint Doctrine Branch, 2011-09), Article 0103.

55. Information provided by the Canadian Forces Aerospace Warfare Centre doctrine branch head, Maj Tony Pepin.

56. Royal Canadian Air Force, *Aerospace Move Doctrine*, Chapter 3.

57. This author was a SAR squadron's standards officer until September 2014, required by the position to have a full understanding of all 1 Cdn Air Division orders, and the only information on PR as of September 2014 was SERE information.

58. Canadian Forces Maritime Warfare Centre website on the Defence Information Network was searched for PR information and documents, but none were found.

59. The following source is the Canadian Army capstone document, and neither it nor other documents listed in Army publications contained any easily identifiable PR content: Canadian Army, DAD SSO Doctrine, B-GL-300-001/FP-001 Land Operations, 1 January 2008.

60. The Para Rescue Association of Canada, p. 13.

61. Evans, p. 209.

62. Canada supplied personnel to Great Britain's Special Operations Executive during the early days of the Second World War and conducted SOF missions, but not missions that involved rescue of personnel. Bernd Horn and Tony Balasevicus, *Casting Light on the Shadows: Canadian Perspectives on Special Operations Forces*, (Kingston: Canadian Defence Academy Press, 2007), p. 182.

63. *Ibid*.

64. *Ibid*, p. 191.

65. *Ibid*, p. 193.

66. Canada, House of Commons, HANSARD, Wednesday, 31 May, 1995, http://www.collectionscanada.gc.ca/eppp-archive/100/201/301/hansard-f/35-1/208_95-05-31/208OQ1E.html (accessed 1 April 2015)

67. Horn and Balasevicus, p.193.

68. *Ibid*, p. 191.

69. Canada, Minister of Public Safety and Emergency Preparedness, "2014 Public Report on the Terrorist Threat to Canada," *Feature Focus 2014: Responding to Violent Extremism and Travel Abroad for Terrorism-related Purposes*, http://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/2014-pblc-rpr-trrrst-thrt/index-eng.aspx (accessed 26 March 2015)

70. Royal Canadian Air Force, *Aerospace Move Doctrine*, p51. Global Affairs Canada is called Department of Foreign Affairs and International Trade in this source, but the name changed in 2014.

71. Scott Lilwall, "Canadians Taken Hostage Abroad in the Past Decade," in *The Globe and Mail*, 23 August 2012, http://www.theglobeandmail.com/news/national/canadians-taken-hostage-abroad-in-the-past-decade/article564834/ (accessed 26 March 2015)

72. Horn and Balasevicus, p. 27.

73. Royal Canadian Air Force, *Aerospace Move Doctrine*, p. 53.

74. Michael Ferguson, "Report of the Auditor General of Canada – Spring 2013," *Office of the Auditor General*, http://www.oag-bvg.gc.ca/internet/English/parl_oag_201304_07_e_38192.html (accessed 25 March 2015).

75. *Ibid*.

76. Major Brian Newman, "Personnel Recovery for Low and Medium Threat Operations: A Required Capability for the Canadian Forces," *Canadian Forces College Papers*, 2007.

77. Ferguson, "Report of the Auditor General of Canada..."

78. Lieutenant-Colonel Christian Lalande, *Op Jaguar – Task Force Commander's End of Tour Report August to November 2011*, (Winnipeg: 1 CAD, A3 SAR, 23 November 2011).

79. *Ibid*.

80. The SAR Capabilities Advisory Group in the RCAF addresses this annually, but an operational training course has yet to be created.

81. The potential for a friendly fire episode was evident at least once in Afghanistan.

82. During Canada's efforts in Afghanistan, SAR Officers conducted limited PR training and acquired experience in ISAF HQ. Since 2011, no production of PR trained coordinators has taken place, as explained by the 1 Cdn Air Div subject matter expert.

83. The US, EAG, and NATO all offer courses between two-and-three weeks long.

84. Air Task Force – Iraq Public Affairs. "Op *Impact*: Royal Canadian Air Force Members Take Part in Combat Search and Rescue Exercise," in *National Defence and the Canadian Armed Forces*, 30 March 2015. http://www.forces.gc.ca/en/news/article.page?doc=op-impact-royal-canadian-air-force-members-take-part-in-combat-search-and-rescue-exercise/i7kv5l2r (accessed 15 March 2015)

85. This knowledge was obtained from personal correspondence with a subject matter expert.

Reflections of a Liaison Officer

by James McKay

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Introduction

This article is a reflection on a recent experience as the Canadian Joint Operations Command (CJOC) Liaison Officer to U.S. European Command. Liaison officer positions are relatively rare and are generally perceived as either a reward for a long career, or as an easy task for a senior officer between more important positions in Canada. These views, however, do not take into account the reality of the situation where, in a number of cases, the liaison officer is the face of the Canadian Armed Forces in those headquarters, and is operating with a significant degree of independence. In addition, they are often a senior commander's personal representative. They are important, as those positions represent the day-to-day workings of relationships between allies.

The article examines the duties of liaison officers to foreign military headquarters at the operational and strategic levels from an interpretative and normative perspective in order to offer some insights on the challenges and benefits associated with those positions. It starts with an examination of the military science literature with respect to liaison officers as it is printed in English, before moving on to a brief summary of a liaison officer's duties. This is followed by a discussion of the challenges experienced by the hosting headquarters, and then, a summary of challenges faced and proposed solutions to those challenges.

The Literature

There is surprisingly little discussion of liaison officers in military science literature, although some appears in work on alliances and coalitions and their maintenance during major conflicts. One example noted that during the 1991 Gulf War, the decision-making structure created to ensure both the Western and Arab sides of the coalition worked well together was supported by an increased number of liaison officers.[1] Another author argued that communications in a coalition setting relies upon relationships with officials from other nations, but ties it to professional military education.[2] Later in the same work, that author described liaison officers as a commander's "directed telescope" to assist in the command and control of forces, but

again returned to the issue of professional military education of a potential pool of liaison officers, and tied it explicitly to the U.S. Army's Foreign Area Officer classification.[3] While this author has a great amount of respect for the professional, talented, and extremely well trained U.S. Army Foreign Area Officers, by no means should this be interpreted as advocacy for the creation of a similar officer classification within the Canadian Armed Forces, as its smaller size and scale makes such an idea unfeasible. Such literature suggests that liaison officers assist in the development and maintenance of interoperability. While the word 'interoperability' tends to lead many to think of technology, it also relates to procedures, and in that sense, liaison officers enable their forces and their hosts' forces to operate more efficiently and effectively together.[4] To borrow a phrase, "The antidote to the fog and friction of coalition warfare is not technology; it lies in trusted subordinates who can deal effectively with coalition counterparts."[5] Paul Mitchell, of the Canadian Forces College, described liaison officers in a work on network centric warfare somewhat like a sensor whose utility was governed by the political situation between two countries.[6] Mitchell later provided greater clarification on the idea by stating that liaison officers fulfil a vital function by ensuring that gaps in information about operations do not persist.[7] This is perhaps the most important function of a liaison officer, but the hardest one to achieve, given an ambiguous status where they are neither staff nor line, and the challenges posed to information sharing by myriad security regulations and the potential for varying interpretations.

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Yet the best and the simplest description of a liaison officer's functions were penned in two papers from Sweden. The authors of the papers used a concept from the business administration literature and argued that liaison officers were, in effect, 'boundary spanners' between two organizations. Combined with this insight was the idea that 'boundary spanners' fulfilled two simple functions; management of the flow of information between the two organizations, while simultaneously representing the interests of the organization that dispatched them.[8] They also argued that this was somewhat contradictory, as it put liaison officers in a position where they would have to make decisions about how and when to share specific elements of information they gather to both their own organization and their hosts independently, and also maintain a modicum of distance from their hosts in order to inoculate their own organization from the effects of any fighting between the two organizations.[9] Their ideas, although corroborated largely from Swedish sources in the context of peace support operations, are applicable across a wide range of contexts in which liaison officers may find themselves. The term 'boundary spanner' is a useful description, but it does not translate well into a military context. There are two fundamental questions: what are liaison officers, and what are their functions?

What is a Liaison Officer?

Liaison officers are a form of trusted guest sent from their own headquarters to another to represent the dispatching commander's interests. Their status is not always well understood by all involved, and this can include the liaison officers

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themselves. I was fortunate in that both CJOC and my predecessor provided me with an excellent handover, and despite the jet lag, I understood the issues, but it took me some time to fully understand my duties and how I could add value. *That's the first challenge*. Despite the best efforts of one's predecessors to maintain continuity, you learn most about your duties by trying to carry them out over time. There is little- to-no formal training, unlike that for serving as a commander or staff officer. Liaison officers are neither embedded nor exchange personnel in staff billets. Their chain of command rests with the formation that dispatched them, and they are expected to provide two types of information over time back to Ottawa. The first is atmospherics, a form of 'catch-all' term that describes the hosts' impressions of the situation of the day and/or Canadian efforts. The second is information directly affecting Canadian operations, such as current situations, future activities and timelines, and issues that require attention. Generally speaking, this means a series of reports, replies to Requests for Information (RFIs), and conversations with Canadian staff to clarify reporting.

Some Challenges

For the hosts, the presence of a foreign liaison officer comes with both costs and benefits. Their challenge, experienced by all headquarters that host foreign liaison officers, is to make the benefits of hosting liaison officers outweigh the costs of doing so. The hosting headquarters has to consider what it is that they want from a liaison officer. In the main, this is information about what the liaison officer's country is doing in the area of operations, and the ability to reach out to allies and partners, should a crisis develop. Thus, there are benefits to be had for the hosts, but the problem of scale makes this more complicated. The size and scale of Canadian activities are modest compared to those of the Americans, which means that providing that information is relatively easy and quick. Some, but not all, of one's hosts might perceive that the benefits are not all that significant as a result. Hosts also need to consider how to organize and interact with their foreign liaison officers. This means command and control, battle rhythm, and office space. For the last ten weeks of my deployment, I temporarily covered both U.S. European Command and U.S. Africa Command. This created the opportunity to compare approaches between the two headquarters. In both cases, the foreign liaison officers were hosted by the Plans branches, but they adopted different methods of organization and interaction with foreign liaison officers. In one case, the approach was centralized where foreign liaison officers were grouped together physically and organizationally in a form of staff directorate under a U.S. O-6 (Colonel or Captain [Navy]), who had a small staff to assist him. In that headquarters, they also had a series of meetings/engagements organized by the staff director on a monthly rhythm, and any other meetings were organized through the country's contact officer. In the other case, the approach was done differently, and it was more 'freeform.' The foreign liaison officers nominally belonged to one of the plans staff directorates, but they worked most closely with an Assistant Chief of Staff for liaison officers and the

host staffs most affected by their country. Office allocations were based upon *availability*, as opposed to *centralization*. The rhythm for meetings in this approach was weekly. Both approaches had merits. And yet, it seemed that in both cases, the two headquarters were working towards ways of getting a better return on investment from their efforts with the foreign liaison officers, and they had reached different conclusions about how to do so.

Neither of them, however, could get around the issue of security. Without delving into the details of physical security and its measures, this represents a form of cost associated with interaction. Our American ally takes security extremely seriously. This meant that depending upon the level of sensitivity associated with the staff in question, access could be controlled tightly. A number of areas are designated "NOFORN" zones. This means that either foreigners simply do not get in, or get in only under escort, and/or all occupants are advised by a security system of the foreigner's presence. As a result, one only sought to interact with those elements of the staff if it was absolutely necessary. This represents a 'double-edged sword.' While it maintains security, it can mean that some staffs are isolated from the liaison officers, and as a result, may not consider opportunities to obtain benefits. Information sharing is also governed by security. The sensitivity of the information dictates the means by which it can be shared (secure or unclassified). This translates into a set of handling instructions for any and all information, and identifies what and with whom that information can be shared. While getting access to the unclassified system is relatively easy and quick, obtaining access to the U.S. secure system can take much longer. I was fortunate in that I had one in days, and the other took weeks. The latter allowed me to communicate effectively with my hosts quickly.

Simply having access did not mean, however, that I had much to communicate. While the staffs in Ottawa were good at pushing what was necessary, I needed the full picture. I did not have direct access to Canadian secure systems until much later, although there was a means of doing so in an emergency. Our systems tend to operate on centralized repositories of information that all users can access as required. Not having this system at first meant that I needed to persuade colleagues in Ottawa to send me material. In the main, they were willing to do so, but this meant a delay in responses to questions from my hosts and my colleagues back in Ottawa devoting some of their time to pushing the information. This presented another challenge; my ability to demonstrate net benefit to my hosts relied upon answering questions or providing information about Canadian operations, activities, and/or perspectives. In some ways, liaison work can resemble bargaining, where the liaison officer has to provide sufficient benefit (through information sharing and responding to crises) to override the costs of hosting over time. On a couple of occasions, one could see glimpses of that calculation occurring within the hosting headquarters. In one example, there was a deliberate decision made to grant foreign liaison officers greater access to the daily update briefs, which meant that the staffs supporting those briefs had to do additional work to enable this. The opportunity was provided for the foreign liaison officers to brief, but initially, as a group, we

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did not provide much information. This was rectified by a request to ensure that the foreign liaison officer briefings occurred each time through a schedule by country. I ended up briefing twice. In one case, it was a summary of the relatively modest Canadian military activities in the area of operations. This meant that the following month, I would have to provide another briefing, and had to ponder what could be briefed that would be of value to my hosts. I marveled at my foreign liaison officer colleagues' abilities to provide informative and valuable briefings, but then again, their efforts in that area of operations were larger in scale and more varied in nature than our own. Fortunately, the second briefing occurred the day after the 2015 federal election. When one considers the time zones, it meant that I was briefing on election results a few short hours after the polls closed in British Columbia and the Yukon. In another example, in an open forum, a subordinate publicly questioned his superior about information-sharing with foreign countries, suggesting that some were far less forthcoming with information and that the U.S. ought to withhold more. The superior's response was masterful; he responded simply, "We're leading the effort." Both examples hint at concerns in some quarters that the U.S. might not have been getting net benefits out of the relationships with other countries.

Possible Solutions

One of the ways to show value was to seek to get involved in the work of the headquarters, but this comes with some drawbacks. Mitchell noted that if liaison officers behave like embedded personnel, this is a quick way to demonstrate 'value' to the hosts.[10] While I believe that this is true, there are some risks. Canadian participation in planning efforts can lead to the expectation that Canada is going to make contributions. Put in other terms, if Canada is not contributing, participation in planning can convey a false impression and ultimately harm relationships between countries. *Behaving* as an embedded or exchange officer consistently will encourage one's hosts to treat the liaison officer like they *are* an exchange officer, i.e. part of a staff directorate. The ability of the liaison officer to represent their commander to their peers in the host head-quarters may degrade as a result. While participation can elicit greater information, there is a potential trade-off in terms of representation. As a result, the adoption of such roles should be more opportunistic and limited in time and scope than persistent. In addition, if liaison officers start to take on the role of staff officers as opposed to acting as the interlocutor between the Canadian and the host staff, they can become a bottleneck.

The ability to share information in a timely manner rests upon a foundation of strong relationships. This, however, takes time, and for that reason, liaison officer assignments should be longer term (2-3 years) whenever conditions permit.[11] I was the third of three officers deployed on a task over a period of 18 months as part of Operation *Reassurance* in 2014-2015. This ended with my deployment as another officer was posted in and accredited to both U.S. European Command and U.S. Africa Command. The task approach was an expedient measure, and it represents an exception to the norm. The reason for having longer terms as liaison officers is that it takes *weeks* if not *months* to establish enough rapport with ones' hosts that they see the benefits of a foreign liaison officer and become willing to share information. For *many*, although certainly *not all*, this is counterintuitive, due to the nature of security regulations. It is not a natural act, and

some may fear, quietly, that this will come back to haunt them. Part of earning trust is being judicious with what is provided, so that hosts learn that honouring the liaison officer's requests do not lead to falling into trouble with their superiors and security staffs. Strong relationships also mean that single issues or problems do not interrupt that flow of information in both directions. One of the more difficult tasks for a liaison officer is dealing with reporting of a negative tone or nature about the hosts, and it does not need to be something the liaison officer communicated themselves. Criticism of allies' plans and actions, from any Canadian source, can arrive back to one's hosts very quickly, due to the interconnected nature of Canada and its allies. In such cases, liaison officers should be the bearers of that criticism to the hosts, as opposed to the staff elsewhere. Hosts are far more likely to appreciate professional candour directly from the liaison officer *in situ* than a faceless individual in a foreign capital. Put in other terms, negative comments made in Ottawa that reach the other capital often lead to negative feedback to hosts, which can erode trust. So, how do liaison officers build relationships? It's a function of time and of never passing up opportunities to learn about and work with the staff in the headquarters. This is not just the liaison officer having positive relations with key staff among their hosts, but rather, the sum of all relationships, personal credibility, and the demonstration of net benefit.

Learning about the hosts was important. The structures of American military activities differ from Canadian structures. Due to our scale, we have a greater degree of centralization of specific activities, such as security cooperation (provision of training to foreign military personnel, equipment donations, etc.) Such activities are either governed by the Policy staff or CJOC, depending upon their nature. In the U.S., these activities are controlled by the combatant commands, but are guided by the Pentagon through a combination of delegations of authorities, policy constraints and restraints, and resources. What this means for liaison personnel is a need to understand the structures at work and their Canadian equivalents in the event that direct communications need to be established between the two. With respect to our major allies, in most cases, our structures are smaller and more centralized. This *also* cuts both ways. On the one hand, it means that our contributions overseas could be perceived as modest due to their scale. On the other hand, it is more likely that the liaison officer has more contacts and a greater understanding of projects and functions within the Canadian structures.

This leads back to the key function of a liaison officer, which is to manage the flow of information between Canada and the hosts. In the main, this comes in the form of Requests for Information (RFIs) from one to the other and vice-versa. A tracking system is crucial to success; not only does this help avoid RFIs getting lost, a liaison officer should be prepared to share the requests with the Canadian side, as it is all too easy for RFIs to be ignored, or for them to surprise others. One such surprise was that, despite being a CJOC LO, other staffs sought information directly, meaning that there was the risk of blindsiding key personnel at CJOC. This meant that, in some ways, I was caught in the middle, which presented another challenge. On one hand, I needed to keep CJOC in the loop, and on the other, I did not want to employ the excuse of process and slow down decision-making in Ottawa. As time went on, I came to use both the 'CC function,' (i.e., more than one addressee), as well as a rollup of the source, nature and replies to RFIs as part of weekly reporting. It was not

until the end of my time that I learned how valuable those two solutions were for the chain of command. Basic staff etiquette is vital for RFI management. If someone is asking for information, it is for a *reason*, and this means that there is a timeline involved. This is as simple as acknowledging the request and providing an estimate of how long it will take to satisfy it. This also is a polite way to indicating to the originator of the RFI that unless it is truly urgent, it takes time to find, request and process/translate the information from host terminology to Canadian terminology, or vice versa. Maintaining strong relationships with the hosts means a liaison officer cannot simply march into another's office and make requests without longer-term consequences. The implication here is that the gathering of information takes time and the comment is more about the liaison officer managing the expectations of their colleagues and superiors back in Ottawa. As a final point, whatever information is provided ought to be accurate, relevant, and brief. The longer it is, the more likely it is that the recipients will not have the time to read it fully and/or digest the most relevant information.

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The management of communication means is vital. Outgoing liaison officers must have a clear understanding of the PACE (Primary/Alternate/Contingency/Emergency) plans for both unclassified and secure systems, voice and data, as well as the relevant contact information for personnel in Canada. If there are any gaps, especially in terms of the national secure systems, these ought to be addressed as a matter of priority. Canada's allies tend to communicate most often by secure systems, and without having a means of doing so, the liaison officer's effectiveness is much reduced. Mitchell eloquently described the information environment in which liaison officers must operate:

Strategic or national domains permit information sharing within a nation's borders and thus tend to be highly secure, rigidly configured networks that permit little or no access for external partners. Allied or bilateral domains permit a certain degree of sharing between national domains, based as they are on pre-established information-exchange agreements. Many are permanently established networks that 'tunnel' into each other, permitting the exchange of e-mail and sometimes web browsing.[12]

Naturally, an important dimension of this function consists of handling information appropriately in accordance with the regulations set by both Canada and one's hosts. Mishandling of information provided by hosts will wreck relationships and greatly reduce one's effectiveness at representing the interests of the Canadian Armed Forces.

Depending upon the location, the liaison officer may be several time zones away from Ottawa. It is all too easy to send e-mail 24 hours a day, but many of the staff in Ottawa that interact with liaison officers hold Blackberries, meaning routine e-mails arriving in the early hours Eastern Time are an irritant at best. The habit of drafting and saving routine messages until an appropriate time reduces this inefficiency.

Sending reports back to Ottawa is one of the more important functions for a liaison officer. My predecessor provided a superb handover, and fortunately for me, this included his distribution list for reporting. It included key staff in CJOC, the Strategic Joint Staff, Canadian Defence Attachés, and the Canadian Army. Despite the jet lag and my inexperience in the position, it was clear that reporting was about developing a network. What this meant over time was that the list of recipients grew and during posting season, would change. I maintained a tracking system to manage the additions and deletions of personnel over time to make sure that reporting was shared and consistent across the network. Taking my cue from my predecessors, I also sought to include other Canadian liaison officers working in other headquarters as it allowed for cross-cueing and the identification of perspectives from different countries, headquarters and developing a richer picture for the dispatching headquarters. In terms of how to report, the key points are accuracy, relevance and brevity. This meant a short slide deck and if further clarification was needed, that would be followed with a concise e-mail. What to report was uncomfortably simple. It was a summary of what happened over the past week, a forecast of future activities and opportunities, and cues for decisions or actions if required. Of course, this meant reporting both on atmospherics and things that affected Canadian operations or activities. Should something sensitive or negative need to be sent, it is best sent via Canadian secure means with as limited a distribution as possible. This helps avoid the aforementioned criticism issue.

Liaison officers ought to get to know their colleagues from other countries. In order to avoid providing a lengthy list of countries represented, I will offer three categories: 'Five Eye,' NATO members and 'partners.' 'Five Eye' countries (Canada/US/UK/Australia/New Zealand) are those allies that have entered into an agreement to enable information-sharing. Due to this agreement, the procedures to share information are relatively smooth and the national communications systems enable this easily. Next category is the NATO members. The procedures are in place, and there are significant efforts to make this sharing as easy as within the 'Five Eye' community, but it is harder to share by this means because the number of potential recipients increases immensely. The last category are the 'partners.' This is a 'catch-all' term for non-NATO allies from outside the area of operations and non-NATO members within the area of operations. Each of these requires specific handling to avoid disclosing information that ought not to be disclosed. The overall implication is that the presence of foreign liaison officers from different categories means that host staffs have to consider the audience relative to the classification and degree to which the information therein could be released. This imposes a greater cost on the hosts. Regardless of their would-be status, the other foreign liaison officers are a valuable source of information and vetting them in advance makes them more amenable to sudden requests when they do come in. In response to a short notice RFI, I reached out to my colleagues and to their great credit, they provided a lot of information very quickly that was summarized and relayed back to Ottawa. Our hosts took note of the exchange and later used it as a means of demonstrating benefits to other directorates within the headquarters. On a related issue, I began to learn which of my Canadian colleagues in other headquarters were cross-cueing what they could share within the limits of security with their hosts when my foreign liaison officer colleagues reported receiving copies of my reports from their own headquarters.

Canadian and Romanian liaison officers during Operation *Reassurance*, 29 October 2016

Liaison officers may find themselves on the leading edge of operations, that is, supporting the planning effort to stage an operation, and the early efforts at execution. This occurred during my time, and there were three lessons that fell out of it. The first was the degree of involvement. At the start of my deployment, I was involved directly, as was my predecessor, with the Strategic Joint Staff as they worked on the direction to CJOC to execute an international operation. Once that was finalized, and CJOC was directed to execute the operation, my involvement in the matter began to *change* and *reduce* as the point of effort went from *planning* to *executing* tasks that enabled the deployment of the Task Force. There was a form of handover of the issue to the staffs from CJOC and the Task Force, and my role became one of tracking the progression of integration. This brings me to the second lesson. Integration of forces, even between close allies, is harder than one might expect, and it can be affected by a range of factors. This includes policy *constraints* and *restraints*, logistical arrangements, funding mechanisms, resources, and host nation support issues. Any of these elements can impede integration, and as a result, even theatre-strategic level liaison officers end up trying to understand the situation at the tactical level from a distance. This provides the third lesson. Supporting the force once deployed meant two things. The first was to respond to their RFIs as quickly as possible. If they were asking for something, it was because they needed it to carry out a task. The second was to avoid contacting them directly for RFIs whenever practicable. Deployed

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forces are sufficiently occupied carrying out the mission and do not need the additional burden of a stream of requests from a liaison officer in a far-flung headquarters. My hosts, however, were interested in ensuring the integration of forces on a common mission went well, and they sought the Canadian perspective on those issues. This was an opportunity to provide them with a net benefit.

Incoming liaison officers, particularly those dealing with plans or operations functions associated with international operations, ought to exhaust every effort to ensure that they spend time with a Political Advisor prior to deployment. The intent of doing so is to develop a reasonable understanding of Status-of-Force Agreements, Technical Agreements and requests from one's hosts for force contributions from Canada. Even a passing knowledge will enable the liaison officer to deal with these issues in a timely and effective manner, as liaison officers are often working at the planning of international operations. These issues, if not handled appropriately, can impose delays on the conduct of operations and/or jeopardize relationships with allies and partners.

The last element of this reflection is advice on how to cope with the independence of being one of the only Canadians in the organization. There are two parts to this: one, to your hosts, you are the face of the Canadian Armed Forces; and two, it is possible to develop a sense of under-utilization as you can find yourself with

gaps in the frequency with which you are being consulted. Being the face of the Canadian Armed Forces may mean your hosts will ask you a range of questions for which you are less than prepared. Simple staff etiquette helps here, where you acknowledge the query, clarify the requirement(s), and then send it back to Canada to see if the appropriate expertise can be harnessed to provide an answer. Bear in mind, however, that the Canadian ability to provide answers is constrained by scale relative to some of our allies. Put in simpler terms, a single American combatant command has approximately 2,000 people relative to roughly 400 assigned to CJOC. If we focus upon specific disciplines or issues, an ally may have a full directorate handling an issue that is handled by a single section or desk in Canada. Being the 'one of' also makes you hypersensitive to visits by Canadian personnel, particularly those that come unannounced. Unannounced visits can convey the message to hosts that we are not coordinating our own organization well but unfortunately this can happen.[13] The hosting of visits is, however, one of the important duties of a liaison officer that consumes time depending upon the administration required for a visit, i.e. security requirements, scheduling, briefing books, and so on. Visits are equally important from the perspective of the dispatching organization, as it provides them with an opportunity to monitor the liaison officer's activities directly, and to verify the accuracy of the liaison officer's reporting on issues and atmospherics. Visits are an excellent antidote to the issue of under-utilization.

One of the more common experiences perceived by a number of liaison officers is when they do not often interact with the organization that dispatched them, and then feel that they are not given much direction and/or feel that reporting may be an exercise in unnecessary work. It is important not to confuse a lack of replies or follow-on questions to reporting with a lack of interest. The dispatching organizations tend to be in Ottawa and are subject to the daily rhythm of the capital, meaning that the dispatching staffs are busy addressing issues and in order of priority, and if they do not signal a reply, it is very likely that the report was read and acted upon without the knowledge of the liaison officer. In short, they are busy dealing with a range of issues and inputs, and therefore do not always have the time to respond. Put another way, you will certainly know it if you are on the path of the main effort and decry the aggressive timelines for reporting tasks. Liaison work comes with ebbs and flows of tasks, hence the perception by many that it is not as arduous as many other tasks. The question becomes how to gainfully use those ebbs. These are the opportunities to deepen understanding of the hosts' organizations and activities through deliberate reading programs, engagements with key leaders and staffs, and production of reports for the dispatching headquarters. In effect, if one is not spanning the boundaries in the immediate sense due to a reduced activity level, one can set the conditions for doing so at a later time. And yet, it can lead to self-questioning about the amount of value being added.

What I discovered towards the end of the task was that the self-questioning was unwarranted and value was indeed being added. The greatest degree of value came primarily through two sets of actions, namely, by providing feedback to my hosts with respect to how Canadian and American forces were working together in a combined effort, i.e., what was going well and where were the points of friction, and also through the simple act of reporting back to CJOC on a weekly basis on both atmospherics and issues directly affecting Canadian operations.

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Conclusion

This reflection was intended to provide insights and advice on how to function effectively as a liaison officer without disclosing any significant details from recent personal experience. The most important insights, from my perspective, were:

1. Build solid relationships with your hosts and other foreign liaison officers.

2. Liaison officers are 'boundary spanners' and end up reporting on host perspectives to the home headquarters and representing home headquarters' perspectives to their hosts.

3. The maintenance of security of information, including appropriate handling, is a vital task.

4. The need to develop an understanding of Technical Agreements and Status-of-Forces agreements and other aspects of international operations handled by policy advisors (POLADs).

5. The value of timely and accurate reporting cannot be underestimated.

It is hoped that this will be of assistance to future liaison officers serving in similar positions in the future.

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NOTES

1. Patricia Weitsman, "Wartime Alliances versus Coalition Warfare: How Institutional Structure Matters in the Multilateral Prosecution of Wars,"in *Strategic Studies Quarterly*, Vol. 4 (Summer 2010), p. 120.

2. Major General Robert Scales, U.S. Army (Retired). "Trust, not Technology, Sustains Coalitions," in *Parameters*, Vol. 28 (Winter 1998/99), pp. 190-191.

3. *Ibid.,* pp. 193-195.

4. For an example of this type of focus, see: Martin Westphal and Thomas Lang, "Conducting Operations in a Mission Partner Environment," in *Joint Force Quarterly*, Vol. 74 (2014), pp. 44-49. The thrust of the article is primarily technological; suggesting the American preference for national communications systems has to be overcome in order to operate with a wide range of allies and partners. In the article, the use of liaison officers is discussed once on page 45, and somewhat negatively at that.

5. Scales, p. 198. This author contends that this statement is equally applicable to alliances.

6. Paul Mitchell, *Network Centric Warfare: Coalition operations in the age of US military primacy*, Adelphi Paper 385, (London: IISS, 2006), pp. 60-61. He was referring to the fact that during the 2002-2003 timeframe, the degree of information sharing by staff in the United States Central Command reduced as the Government of Canada delayed making a decision on potential contributions to operations in Iraq.

7. *Ibid.,* p. 65.

8. Aida Alvinius, "The Inadequacy of Bureaucratic Organizations: Organizational Adaptation through Boundary Spanning in a Civil-Military Context," in *Res Militaris*, Vol. 3, No. 1 (Autumn 2012), p. 3.

9. Aida Alvinius, Camilla Kylin, and Gerry Larsson, "Standing on both sides: The Process of Collaboration/Liaison in Civil-Military Contexts." Paper delivered at the 1st Conference of the International Society of Military Sciences, Amsterdam, 25-26 November 2009, p. 3, accessed at <http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A581653&dswid=9336>, 10 November 2015.

10. Mitchell, pp. 65-66.

11. A Chief of Review Services study of the Exchange and Liaison Program dating from 2006 indicated that the mean term of service for a liaison officer was 39 months. See: Chief of Review Services, *Exchange of CF Outside Canada (OUTCAN) Exchange and Liaison Programs*, 1258-67-2 (CRS), (Ottawa: Department of National Defence, 2006), p. 3.

12. Mitchell, p. 55.

13. To the best of my knowledge, this occurred once in another headquarters.
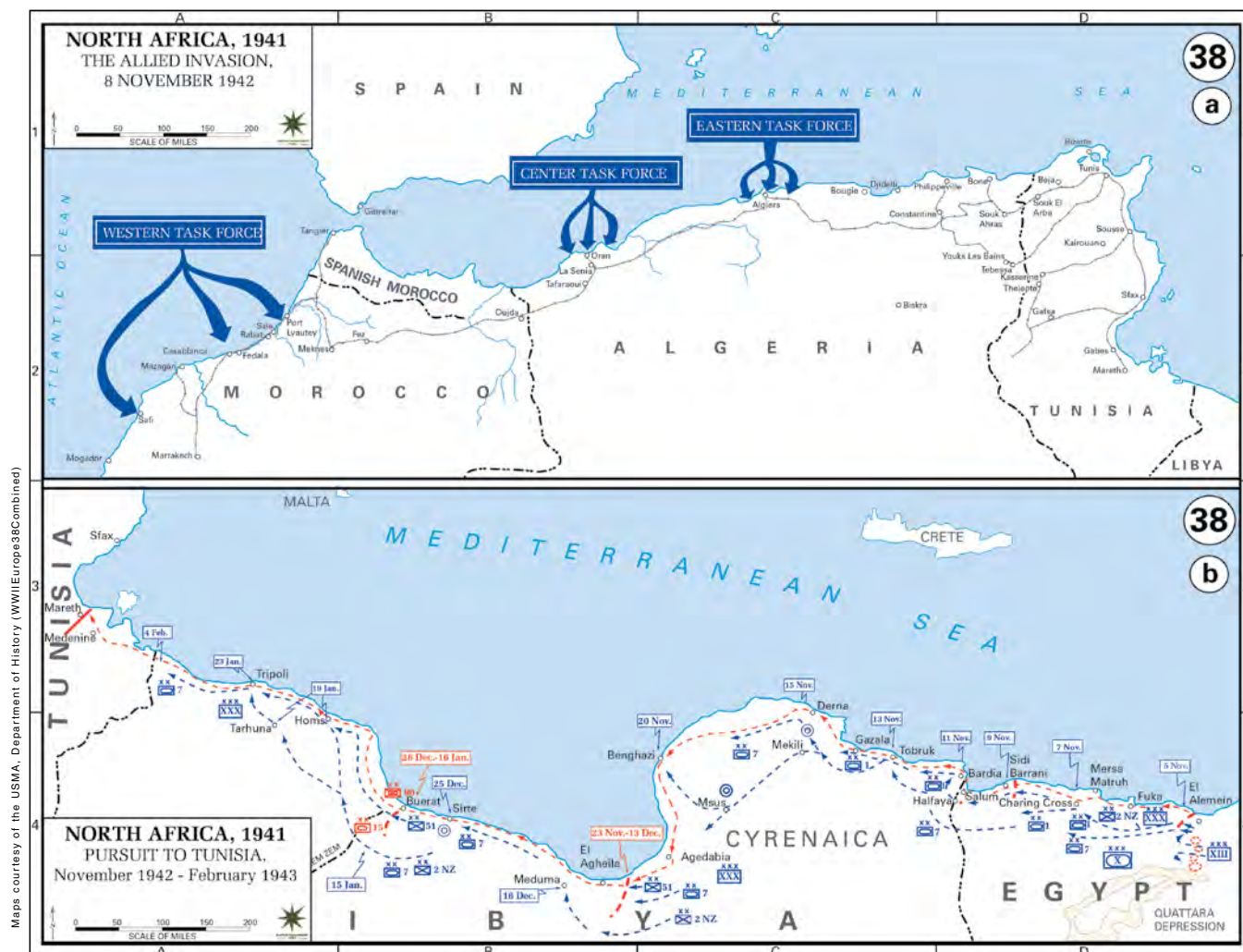
Canadian Infantry in North Africa, January–May 1943
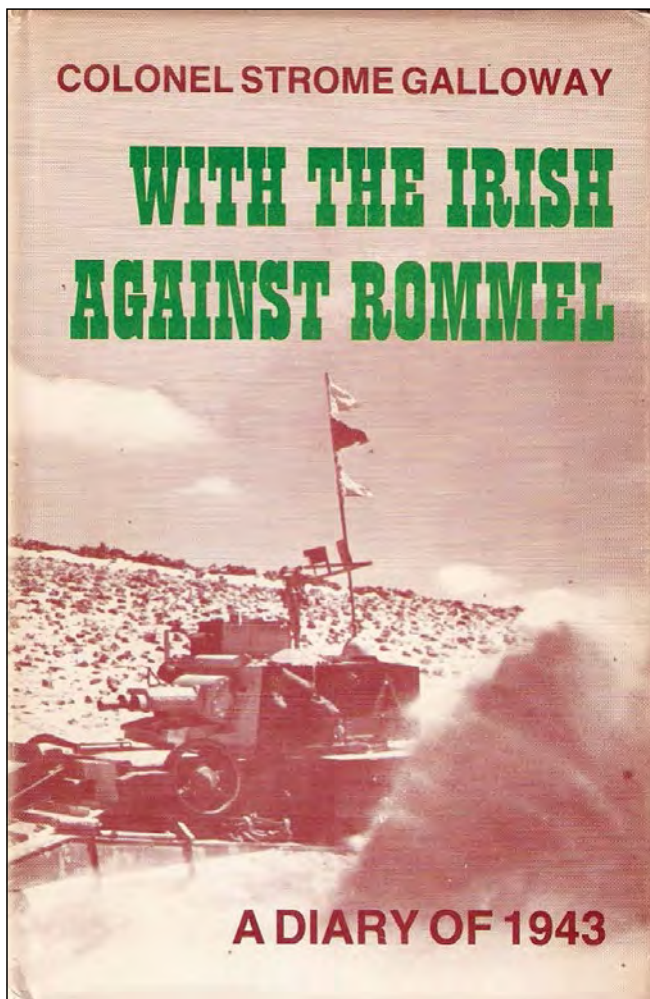
by R. Daniel Pellerin

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Introduction

Loaning soldiers to serve with allied forces can be an effective means of providing practical operational experience. During the Second World War, Canadian divisions began to arrive in the United Kingdom in December 1939. By the end of 1942, the Canadian Army had well over 100,000 troops stationed in the United Kingdom. Yet, aside from the catastrophic Dieppe Raid in August 1942, Canadian formations were kept out of active theatres of war. The vast majority of Canadian soldiers had no combat experience, had grown bored with their training, and were frustrated with their inaction, while British and other Commonwealth forces fought in North Africa. However, in early 1943, a small number of Canadian soldiers participated in a little-known troop lending program. Nearly 350 Canadian soldiers served with forward units in the British First Army in Tunisia for three months in order to give them combat experience.

Historians have paid little attention to this episode of Canada's military history. C. P. Stacey devoted a short discussion of the program in Volume 1 of the army's official history, *Six Years of War* (1957), in which he concluded that the experience in North Africa was highly beneficial.[1] Strome Galloway of the Royal Canadian Regiment published his diary and memoirs on his experience in North Africa in *With the Irish against Rommel* (1984), although the book made little immediate impact. In *Instruire une armée* (2007), Yves Tremblay discussed the program, but relied heavily upon Stacey's work.[2]

COLONEL STROME GALLOWAY

WITH THE IRISH AGAINST ROMMEL

A DIARY OF 1943

Lieutenant General Bernard Montgomery commanding the British Eighth Army in Africa

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The present study examines the origins of the troop loan program and the experiences of some of its participants. It argues that this scheme succeeded in allowing Canadian infantrymen to gain first-hand combat experience, which they could not have acquired while stationed in the United Kingdom and which they then brought back to their units. Galloway, along with Alex Campbell of the Hastings and Prince Edward Regiment, kept diaries of their time in North Africa, and others submitted reports to their units upon their return. All these sources are useful for understanding the Canadians' experiences there, and the overall success of the endeavour.

The Program

The British had been fighting the Germans and Italians in Egypt and Libya since the summer of 1940. After the Americans entered the war in December 1941, the British managed to convince them to commit forces to North Africa in 1942. On 8 November, the British and the Americans invaded French Morocco and Algeria in Operation *Torch*.[3] The Axis forces were thus threatened from two sides: while Montgomery's Eighth Army continued to chase Rommel's forces through Libya, the British First Army and the US II Corps pushed from the west. Over the late autumn and early winter of 1942–1943, Rommel withdrew his forces to Tunisia, where he had the ports of Tunis and Bizerte at his disposal for resupply and reinforcements.

The senior Canadian general in the United Kingdom, Lieutenant-General A. G. L. McNaughton, saw *Torch* as an opportunity. He was famously averse to having Canadian divisions fight separately, so he did not wish to devote substantial forces to support the campaign in North Africa. But the Canadians absolutely needed combat experience. Perhaps a number of Canadian personnel could be loaned to the British temporarily. This could not occur at the start of *Torch* because there was not enough shipping space available for large numbers of Canadian troops to be sent to North Africa.[4]

It was only at the start of December 1942 that arrangements could begin to be made. By that time, First Army had already managed to penetrate into Tunisia. McNaughton was able to convince the War Office to allow 150 Canadian troops to be loaned to the British First Army for three months. Spaces were apportioned on a *pro rata* basis to the various arms of Canada's four divisions (a fifth was on the way), two armoured brigades, and corps and army ancillary troops, as well as its reinforcement units in the United Kingdom. The men selected were to be the

Lieutenant General A.G.L. McNaughton (centre)

50 Canadian soldiers would be sent each month, starting in late-January, and would also be on loan to the British for three months. The infantry would provide nine officers and nine NCOs, or 36 percent of these smaller serials.[8] By the end of December, all the necessary arrangements were settled. The first batch of Canadians was ready to go to North Africa in the new year.

The Tunisian Campaign

The conditions in Tunisia were far different than anything the Canadians had yet experienced. The North African desert was an entirely alien landscape. Although the temperature would rise during the day, nights were extremely cold. That the Allies had been unable to destroy the Axis forces in Tunisia by the end of December meant that they would have to spend the next few months fighting in terrible winter weather. The rainy season in Tunisia normally lasted from December to February, but this particular winter saw plenty of rain as late as April. The rain turned the ground into mud for days afterward, which presented an obstacle to vehicles.

The Tunisian geography only complicated matters. In the north, the Medjerda River Valley is criss-crossed by "wadis," creeks that cut across the plains, had steep banks, and which could not normally be seen from a distance. Wadis were unpredictable because they would be dry one day, then after rain, would become fast-moving, deep rivers. They often served as serious vehicle obstacles. South and southeast of the valley was the Tunis Plain, and to the west and south of the plain were two chains of rocky hills: the Eastern Dorsale, stretching southward from the vicinity of Tunis, and the Western Dorsale, which cuts across the Algerian border.[9] All this meant that mobile warfare in Tunisia was impossible. The result was that both sides relied heavily upon patrol work. 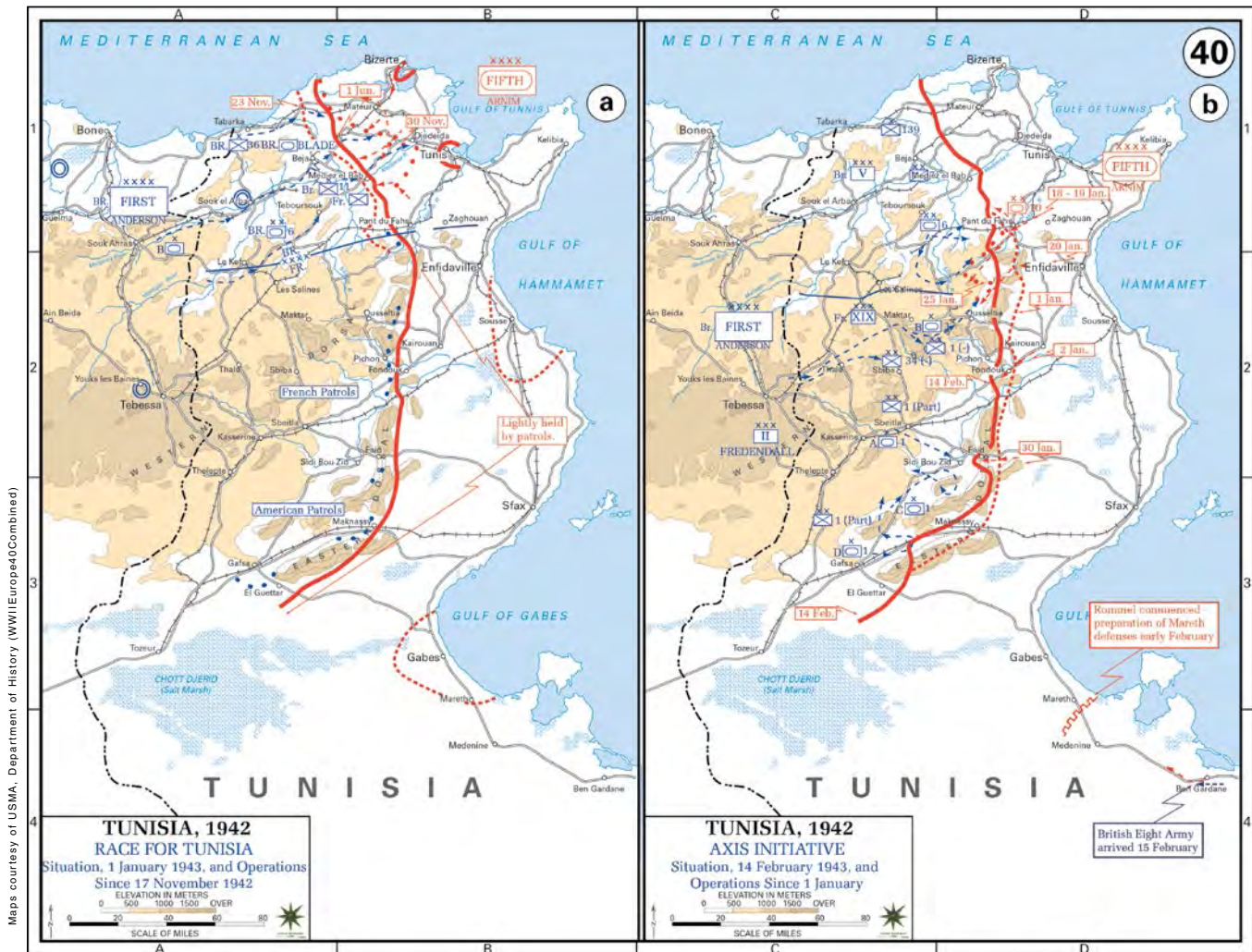Units, often in contact with the enemy for months, would dig in and hold important positions. Consequently, most fighting was by patrols, which were normally done at night, as the terrain offered the enemy excellent visibility in the daylight.[10]

most capable officers and non-commissioned officers (NCOs) that units had to offer. NCOs would be of the rank of sergeant or above, while officers would be of the rank of major or below, except for two spaces reserved for lieutenant-colonels, who would perform staff duties.[5] Selected men would be on loan to First Army for about three months. They were not to be merely "attached" to British units: the men selected would actually be inserted into First Army's reinforcement pool and used to fill positions as required. Their task was to gain first-hand combat experience and pass on the lessons they learned to their units upon their return.[6]

In the end, the first serial contained 141 Canadian soldiers, including 25 officers and 20 NCOs from the infantry.[7] At the end of December, it was decided that further serials of about

> **"The senior Canadian general in the United Kingdom, Lieutenant-General A.G.L. McNaughton, saw *Torch* as an opportunity."**

TUNISIA, 1942
RACE FOR TUNISIA
Situation, 1 January 1943, and Operations
Since 17 November 1942
ELEVATION IN METERS
0   500   1000 1500   OVER
0   20   40   60   80
SCALE OF MILES

TUNISIA, 1942
AXIS INITIATIVE
Situation, 14 February 1943, and
Operations Since 1 January
ELEVATION IN METERS
0   500   1000 1500   OVER
0   20   40   60   80
SCALE OF MILES

Captain Alex Campbell was among the first batch of Canadian personnel, which arrived at Algiers on 3 January 1943. Most of the Canadians were not assigned to any units for weeks until vacancies could be found.[11] In fact, as of 20 January, Campbell was still at a camp at Souk-el-Arba in northern Tunisia, and still had not been told exactly what his job was in North Africa. He only found out the next day that he and his comrades would be posted to British units for front-line service.[12] Campbell was eventually posted to 2nd Battalion, Coldstream Guards, part of 1st Guards Brigade, 78th Infantry Division. Predictably, he soon found himself participating in patrols. On the night of 23 January, only a day after arriving at his adopted unit, Campbell went on a patrol with No. 14 Platoon. The objective was to locate a German observation post, cut its telephone wire, and, if possible, capture a prisoner. At 0300 hours, the platoon had successfully cut the wire, but no German came out to repair it. The patrol returned safely, albeit without a prisoner.[13]

While Campbell was busy with the Coldstream Guards, the second batch of Canadians had already arrived in North Africa and its members were awaiting assignment to forward units. On 13 February, Captain Strome Galloway and two other Canadians were posted to 2nd Battalion, London Irish Rifles (2 LIR), part of 38th (Irish) Infantry Brigade, 6th Armoured Division. Galloway was assigned to "F" Company, which was made up of mostly new men

after losses suffered in a battle at the end of January. That night, Galloway heard the ominous sounds of battle for the first time.[14]

On 14 February, the Germans launched Operation *Frühlingswind* (*Spring Wind*), an attack with two armoured divisions against a large stretch of the US II Corps' frontage on the southern portion of a mountainous ridge known as the Eastern Dorsale. The attack was directed at Sidi Bou Zid and Kasserine. On the first day of the offensive, the Americans took heavy losses and were driven back to the west and southwest. The attack threatened the Allies' entire position in Tunisia: First Army was now at risk of being completely outflanked from the south. Anderson and Eisenhower agreed that the Eastern Dorsale should be sacrificed; US II Corps would stop its attempts to reclaim lost ground in the south and instead hold fast, while the bulk of First Army shifted southward to Sbiba to halt the German advance and cover the French and American withdrawal.[15]

1st Guards Brigade and the US 18th Regimental Combat Team moved to Sbiba on the 17th of February. The Coldstream Guards arrived at 2300 hours and spent the next day digging in. The battle for Sbiba began at 1000 hours on the 19th. While with the carriers on a reconnaissance patrol, Campbell was chased away by four enemy tanks, including a captured *Sherman*, but thankfully, the patrol made it back to friendly lines without any casualties. Both

A German army *Panzer IV* tank with the gun turret blown away near Bou Arada, 18-19 January 1943

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But Galloway would soon get his first taste of combat, for the Germans saw an opportunity to hit the Allies hard while they were still reeling from *Frühlingswind*. The Germans hoped that their previous attack had prompted the Allies to shift enough of their strength south to stabilize the situation at Kasserine, and that Rommel's forces would be able to strike hard in the north. At dawn on 26 February, Operation *Ochsenkopf* (*Ox Head*) commenced. It was a three-pronged attack: one formation would strike at Béja; another would encircle British forces at Medjez el Bab; and the third would conduct a pincer movement in the Bou Arada valley and drive through El Aroussa to Gafour.[18]
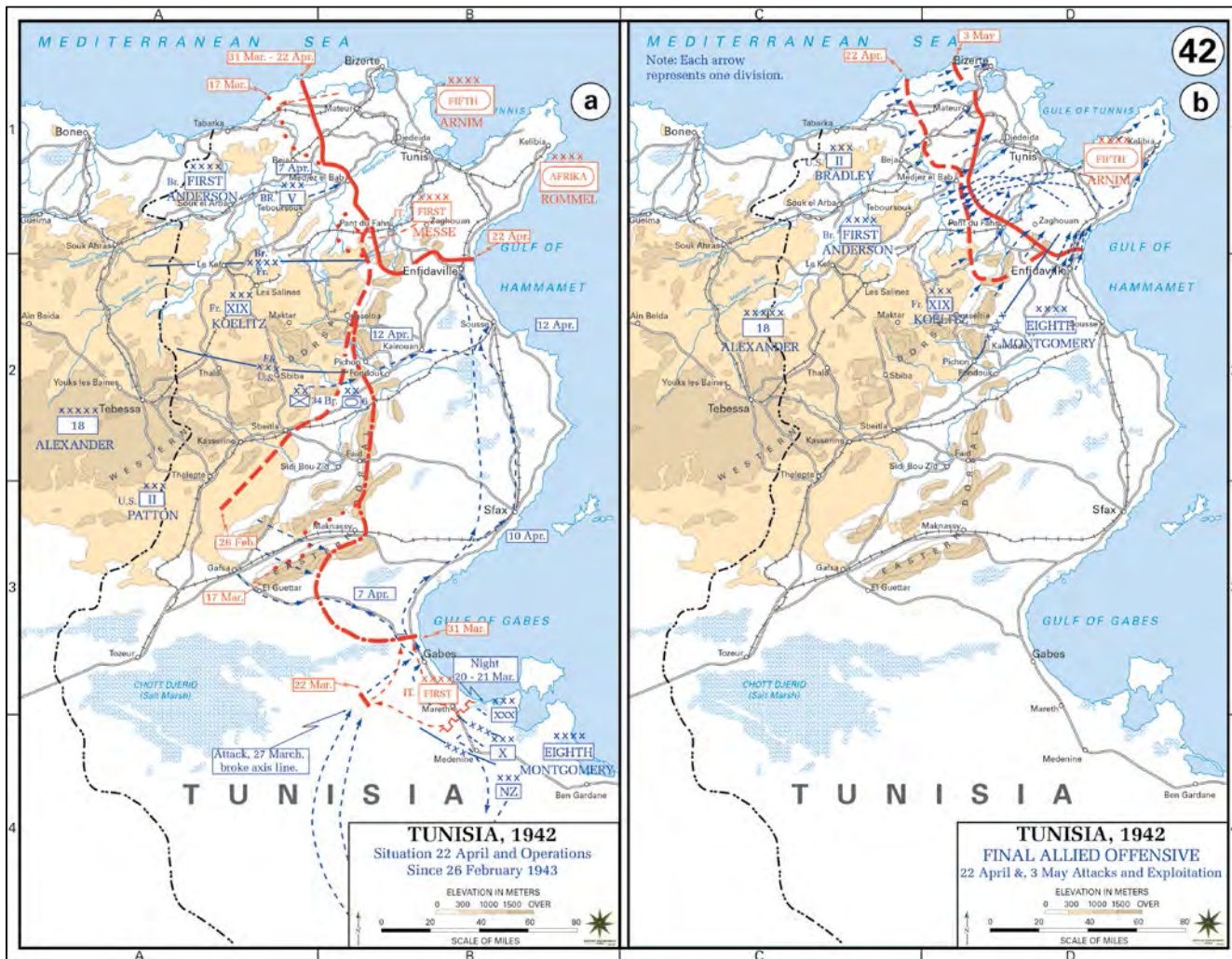
2 LIR was still at Bou Arada at the time, and they were right in the Germans' path. The day would be filled with close calls for Galloway. When the Germans attacked in the morning, "F" Company was soon in total disarray.

sides exchanged heavy artillery and mortar fire, resulting in the destruction of four Allied and eight German tanks. The next day, the battalion beat back a German infantry attack, suffering six killed and nine wounded and losing four tanks. One company had been caught in the open by friendly mortars. The Germans continued their attacks on the 21st; No. 14 Platoon suffered one more wounded and lost three *Churchill* tanks. Then, the Allies began a counter-attack, only to find that the Germans were falling back.[16]

Meanwhile, the Irish Brigade remained at Bou Arada in the north during the German offensive, and as such, it was spared from intensive fighting. On the night of 21 February, a week after joining 2 LIR, Galloway conducted his first reconnaissance patrol. It consisted of just himself and a rifleman. Over the course of five-and-a-half hours, the two men reconnoitred eight features to see if they were occupied by Germans. They searched the buildings of half a dozen farms, were fortunate not to encounter any Germans, and returned safely after midnight.[17]

> **"Meanwhile, the Irish Brigade remained at Bou Arada in the north during the German offensive, and as such, it was spared from intensive fighting."**

Upon receiving word that the Germans were coming, Major Colin Gibbs, the company commander, organized a counter-attack. Galloway took command of No. 12 Platoon and was ordered to take a position on a hill to prevent the Germans from reaching a place nicknamed "Stuka Farm." While on the hill, Galloway's platoon came under machine gun fire; the Germans had penetrated the boundary between "F" and "G" Companies. Galloway's platoon went to ground and came under mortar fire, which killed four and wounded two. Galloway led his men in a charge across open ground, fire-swept by machine guns, on the farm itself, which he believed to be held by the Germans, but was, in fact, already occupied by some members of the company headquarters. Once they realized the Allies had possession of the farm, the Germans poured mortar and machine gun fire into the farm buildings. Galloway's men turned the farm into a fortress; they would try to hold it until the battalion commander could organize a proper counter-attack. Just before noon, the Germans attempted to take the farm. The platoon managed to withstand the attack, but the Germans did manage to

a

M E D I T E R R A N E A N   S E A

TUNISIA, 1942
Situation 22 April and Operations
Since 26 February 1943

ELEVATION IN METERS
0   300   1000 1500 OVER

SCALE OF MILES
0   20   40   60   80

T U N I S I A

b

42

M E D I T E R R A N E A N   S E A
Note: Each arrow represents one division.

TUNISIA, 1942
FINAL ALLIED OFFENSIVE
22 April &, 3 May Attacks and Exploitation

ELEVATION IN METERS
0   300   1000 1500 OVER

SCALE OF MILES
0   20   40   60   80

T U N I S I A

Captain Strome Galloway in the field

capture three stretcher bearers. That afternoon, Galloway pulled his men back to a cactus grove behind the farm. This was to take cover from a British artillery barrage in support of a counter-attack, which ultimately went unopposed because the Germans withdrew from the area. The situation was thus restored to the Allies' favour. That night, "F" Company was able to regroup. It had lost two officers wounded, eight other ranks killed, and nine other ranks wounded.[19]

Campbell also participated in withstanding *Ochsenkopf*. On the 28th, the Coldstream Guards' No. 3 Company was ordered to put in an infantry-tank attack. The company left at 1300 hours on *Churchill* tanks and encountered the Germans at a place called Steamroller Farm. The attack began at 1545 hours, and within minutes, five *Churchills* were destroyed. At 0500 hours, the attacking force was recalled. The company returned to El Aroussa, having lost two killed and ten wounded, including an officer. In his diary, Campbell expressed disappointment "…that we did not finish the job," but also wrote with glee, "I got my first German."[20] However, Campbell would not get to participate in another battle in Tunisia. On 10 March, he received his orders to make his way to the rear echelon and return to the United Kingdom.[21] Galloway, meanwhile, was posted to 38th Brigade's headquarters, and his tour in Tunisia ended on 14 April.[22]

The experiences of Alex Campbell and Strome Galloway demonstrate that the Canadian infantrymen did not have it easy in Tunisia. They did not merely *observe* the major operations in winter and early spring 1943, but *actively participated* in them. The infantry's life in Tunisia was marked by miserable weather, nightly patrols, constant enemy air attacks, and violent battles.

Lessons Learned

The Canadians sent to North Africa were not required to submit regular reports to Canadian Military Headquarters (CMHQ) in London with respect to their experiences. Rather, they were instructed simply to keep their notes on their person and bring them back to their units.[23] Consequently, there are only a limited number of surviving accounts. Nevertheless, Canadian officers were able to

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Guns of Field Regiment in action between Chaouach and Toukabeur, near Longstop Hill, 22 April 1943

deduce important lessons from their experience with front-line units. These lessons were centred around patrol work, fire discipline, training, junior leadership, and attack doctrine.

The Canadians sent to North Africa certainly believed they had gained valuable experience. In a letter to a friend in the Royal Regiment of Canada that was reproduced in a CMHQ file, Captain G. M. MacLachlan wrote, "I have learned as much in 5 days as one learns in 3 mths [months] in England. If I am able to get back and pass on a few things it will all have been very worthwhile [*sic*]."[24] On his return to the United Kingdom, Campbell wrote to his mother, "…for the first time in some years I felt that I was really doing something to help win. I have learned a great deal that should be of value later on."[25] Looking back decades later, Galloway said, "There is no doubt but that experience is the best teacher."[26]

The Canadians also provided great help to the British. One of the Canadian staff officers, Lieutenant-Colonel W. A. Bean of the Highland Light Infantry of Canada, had filled in as Deputy Adjutant and Quartermaster General for 78th Infantry Division, and had spent some time at V Corps headquarters. In his report to CMHQ, he wrote: "It appears certain that the attachments of the first group [of Canadians] were extremely useful, not only to the Cdns themselves

but to the units with which they served. The experience gained should be valuable. At one time Cdn offrs [officers] comd [commanded] 3 coys [companies] and supplied a coy 2 i/c [second in command] in one bn [battalion]. While this is not typical, it is an example of the work done."[27] Bean was referring to a point in early March when four of 2 LIR's companies were commanded by Canadians, including Galloway, and in fact, very few of the battalion's officers at the time were actually from the regiment itself.[28]

Given that the Tunisian Campaign was characterized by patrol warfare, many of the 'lessons learned' related to patrol work. Major Nick Kingsmill of the Royal Regiment of Canada had served with 6th Battalion, Royal Inniskilling Fusiliers, which was also part of 38th Brigade. His report to his superiors discussed patrol work in Tunisia at length. He found that reconnaissance patrols of two-to-three men were ideal: one man would watch the enemy, while another would keep watch of the surrounding area. Fighting patrols were normally conducted by an officer or NCO and about ten men; this was a force big enough to capture a prisoner. Kingsmill found that patrols should be lightly equipped, but definitely armed with automatic weapons and grenades. The general policy was to send out a patrol at dusk or very late at night; otherwise, the patrol would likely run into a German patrol.[29]

photo: akg-images/ullstein bild, image AKG425815

General Erwin Rommel (right), Commander-in-Chief of the *Afrikacorps*, speaking with soldiers of the Italo-German tank divisions.

Campbell recorded some notes in his diary with respect to things he learned. He was much more critical than Kingsmill of the way in which patrols were conducted. Fighting patrols were very dangerous and they risked losing good men, something that needed to be factored in before a patrol was ordered. In fact, he believed that fighting patrols should be used only as a last resort when there was no better way to obtain information. He wrote that patrol work overall needed to be improved, that men "did not carry out lessons learned in training," and that they were a terrific strain on platoon commanders.[30]

The Canadians also emphasized the importance of fire discipline in Tunisia. This North African nation's climate and open plains made visibility exceptionally good, and this was the reason patrols and any other type of movement had to be done at night. Because visibility was so good, it was easy for the infantry to underestimate distances and fire on the enemy too soon. Kingsmill stressed that fire discipline had to be enforced.[31] In a detailed report to his unit on his experience with 2nd Battalion, Coldstream Guards, Captain P. F. Ramsay of 1st Battalion, Canadian Scottish Regiment, made similar remarks about fire discipline and visibility.[32] On the subject of cover, the Canadians emphasized the importance of making "digging in"

"Some officers suggested that more be done to train the Canadian infantry in minor tactics, desensitize soldiers to battle conditions, and develop the initiative of junior leaders."

automatic. Indeed, what struck MacLachlan was that the unit to which he was posted, 5th Battalion, The Buffs, had a habitual instinct to dig in whenever it moved to a new location. He wrote, "If our bn [battalion] can be trained to do this automatically, we will save dozens of casualties in our first show."[33] Ramsay emphasized the same sentiments, as did Galloway in his memoirs.[34]

Some officers suggested that more be done to train the Canadian infantry in minor tactics, desensitize soldiers to battle conditions, and develop the initiative of junior leaders. Campbell discussed "battle drill," a type of training that had emerged in late 1941 and had since become popular with Canadian troops. It involved "…the reduction of military tactics to bare essentials which are taught to a platoon as a team drill, with clear explanations regarding the objects to be achieved, the principles involved, and the individual task of each member of the team."[35]

According to Campbell, in Tunisia, "Battle drill training was not always used. Where no cover is available, men must be willing to cross open ground, cover by arty [artillery], smoke & fire. As soon as coy is committed coy commander looses [*sic*] control. Every man must work as a team."[36] With respect to develop-

ing the initiative of junior leaders, MacLachlan wrote: "We must give our NCOs much more of a show in the way of responsibility. The NCOs here do well, many things we would give an officer to do." After gaining combat experience in Tunisia, he also believed battle drill training could afford to be even tougher: "No scheme we ever did is anything like this for toughness, not so much in the sense of great forced marches but in the way of continual work, alarm, fatigue and nerve strain and unlimited dirt, cold and wet. If I have the chance and a Coy on my return I am going to arrange little shows which will make the impact of the real thing much less severe."[37]

As a company commander, Alex Campbell's notes on attacking provided suggestions for improving offensive doctrine. He wrote that because of shortages of men, most attacks were made by companies, and thus were very weak. He wrote: "Officers & men had plenty of courage but not a great deal of originality." He believed that there needed to be sufficient time to launch an attack; if the men had to march to a new area and dig in, they would be too exhausted to

Canadian despatch riders near Tunis, Tunisia, July 1943

DND/LAC PA-160027/Terry F. Rowe

attack effectively the next morning. Moreover, he emphasized that attacking men must be loaded as lightly as possible; everything had to be sacrificed for more ammunition. His experience during the battle at Steamroller Farm also illustrated how important it was for higher headquarters to plan for keeping forward units supplied: "If infantry can take & hold a position there must be no excuse for ammo & food not being brought forward."[38]

The Canadians sent to North Africa thus learned valuable lessons that they could not have learned during their normal training in the United Kingdom. It was one thing to be told by an instructor the importance of instinctively going for cover. It was quite another to take real enemy fire and have to find cover or face certain death. Furthermore, no matter how realistic training methods like battle drill were, no exercise could possibly simulate the exhaustion, stress, and fear of combat. After experiencing combat, Canadian officers and NCOs who participated in the Tunisia program were better equipped to lead their men in battle than those who had not.

Conclusion

Altogether, 201 Canadian officers and 147 NCOs were sent to North Africa, excluding those sent under special arrangements. However, the troop-lending program was not without a price. The Canadians did suffer casualties; unsurprisingly, the majority of these were infantrymen. Five Canadians

were killed in action, including one officer and two NCOs who were infantrymen. Two other Canadians later died of their wounds. Six Canadian officers and three NCOs were wounded in action. Of these, four officers and two NCOs were from infantry units. Three Canadian officers were taken prisoner, one of whom died in captivity.[39]

Nevertheless, the program was a success, particularly for the infantry. The experience that infantry officers and NCOs gained serving in front-line units marked an important phase in their training. As intended, they were able to bring this experience to their home units to prepare them for upcoming operations in the Mediterranean and Northwest Europe. To understand the experiences of the Canadian infantrymen who served in Tunisia, the value of their diaries, letters, and reports cannot be overstated. In particular, the diaries of Alex Campbell and Strome Galloway are the most comprehensive first-hand accounts of the program.[40] Lending Canadian troops to the British First Army in North Africa also foreshadowed the CANLOAN program, a comparable scheme devised in 1944 in which 673 Canadian officers volunteered for service in British units fighting in Northwest Europe.[41] The Tunisia program thus serves as a testament to the usefulness of troop loans in providing combat experience to soldiers who would otherwise have been kept out of action.

CMJ

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2. Yves Tremblay, *Instruire une armée: Les officiers canadiens et la guerre moderne, 1919–1944* (Outremont, QC: Athéna, 2007), pp. 318–322.

3. Detailed accounts of Operation *Torch* include I. S. O. Playfair and C. J. C. Molony, *The Mediterranean and Middle East*, Vol. 4, *The Destruction of Axis Forces in Africa* (London: HMSO, 1966), Chapters 5–6; George F. Howe, *Northwest Africa: Seizing the Initiative in the West* (1957); reprint, (Washington: Center of Military History, US Army, 1993), Chapters 6–13; and Rick Atkinson, *An Army at Dawn: The War in North Africa, 1942–1943* (New York: H. Holt, 2002), Chapters 2–3.

4. Library and Archives Canada (LAC), Record Group (RG) 24, vol. 12185, reel T-17477, file 1/Attach Ops/1: LGen K. Stuart (Chief of the General Staff), tel. CGS 603 to LGen A. G. L. McNaughton (General Officer Commanding-in-Chief First Cdn Army), 9 Nov 1942; McNaughton, tel. GS 3875 to Stuart, 16 Nov 1942.

5. *Ibid*. McNaughton to Brig N. E. Rodger (Brigadier, General Staff, CMHQ) re: "Attachment – Canadian Personnel, First (British) Army – Tunisia," 1 Dec 1942; McNaughton, tel. GS 4008 to Stuart, 1 Dec 1942; Rodger to Deputy Adjutant General, CMHQ, 2 Dec 1942, para 2; MGen P. J. Montague (Senior Officer, CMHQ), circular letter re: "Attachments – British Army," 3 Dec 1942, para 2.

6. *Ibid*. Montague, circular letter re: "Attachments – British Army," 3 Dec 1942, para. 4.

7. *Ibid*. Rodger to HQ, First Cdn Army re: "Attachment – Cdn Personnel to First Army, Tunisia," 10 Apr 1943, para 3.

8. *Ibid*. Montague, circular letter re: "Attachments – British Army," 28 Dec 1942; CMHQ, tel. GS 104 to National Defence Headquarters, 15 Jan 1943, para 4; Rodger to HQ, First Cdn Army re: "Attachment – Cdn Personnel to First Army, Tunisia," 10 Apr 1943, para 3; C. P. Stacey, "Attachment of Canadian Officers and Soldiers to First British Army in Tunisia, 1942–1943," CMHQ Report No. 95, 12 May 1943 (Directorate of History and Heritage, Department of National Defence (DHH)), paras 5–7, 36, and amendment 1, para 1. The second serial, which left in late January, was slightly larger than the subsequent serials, with 57 men, including 11 infantry officers and 10 infantry NCOs. The third and fourth serials included 26 officers and 24 NCOs each. The fifth and final serial, which arrived in mid-May, included 39 officers and 11 NCOs, was mostly comprised of men from supporting arms, as the campaign had already ended by that time.

9. United Kingdom (UK), War Office (WO), "North Africa: November, 1942–May, 1943," *Notes from Theatres of War* (*NTW*) No. 16 (Oct 1943), sections 1 (1), 2 (1).

10. LAC, RG 24, reel C-8283, file H.Q.S. 3367-8-3: Maj N. Kingsmill (Royal Regiment of Canada (R Regt C)) to HQ, First Cdn Army re: "Report on N. African Campaign – Lessons, etc.," 17 Mar 1943, (hereafter "Kingsmill Report"), para 3.

11. LAC, RG 24, vol. 12240, reel T-17842, file 1/ME/1/2: LCol W. A. Bean (Highland Light Infantry of Canada) to Montague re: "Attachment – First British Army – North Africa: Preliminary A/Q Report" (hereafter "Bean Report"), 11 Feb 1943, para 2.

12. George Metcalf Archival Collection, Canadian War Museum (CWM), 20100088-025: Capt A. R. Campbell (Hastings and Prince Edward Regiment), "Diary of North African Interlude" (hereafter "Campbell Diary"), 20–21 Jan 1943.

13. *Ibid*, 23 Jan 1943.

14. Strome Galloway, *With the Irish against Rommel: A Diary of 1943* (Langley, BC: Battleline Books, 1984), pp. 45–48.

15. Playfair and Molony, pp. 287–293; Bruce Allen Watson, *Exit Rommel: The Tunisian Campaign, 1942–43* (1999; reprint, (Mechanicsburg, PA: Stackpole Books, 2007), pp. 75–80.

16. Campbell Diary, 17–21 Feb 1943.

17. Galloway, pp. 63–64.

18. Playfair and Molony, pp. 305–306; Watson, pp. 112–113.

19. Galloway, pp. 73–82, p. 85.

20. Campbell Diary, 28 Feb 1943.

21. *Ibid*, 10–13 Mar 1943.

22. Galloway, pp. 130–140, 145.

23. LAC, RG 24, vol. 12185, reel T-17477, file 1/Attach Ops/1: Montague to Undersecretary of State for War re: "Personnel Attached First Brit. Army – Reports to C.M.H.Q.," 22 Dec 1942, para 4.

24. LAC, RG 24, vol. 12240, reel T-17842, file 1/ME/1/2: Capt G. M. MacLachlan (R Regt C) to Peter, 23 Jan 1943 (hereafter "MacLachlan Letter").

25. CWM, 20100088-030: Campbell to Sarah Jane Railton Campbell (mother), n.d. (ca. Apr 1943).

26. Galloway, p. 163.

27. Bean Report, paras 1, 16.

28. Galloway, pp. 97–98.

29. Kingsmill Report, para 5.

30. Campbell Diary, attached notes.

31. Kingsmill Report, paras 2, 18.

32. War Diary, 1st Battalion, Canadian Scottish Regiment, Apr 1943: appendix 7, Capt P. F. Ramsay, "Report – Capt. P. F. Ramsay: First Army – North Africa," 15 Apr 1943 (hereafter "Ramsay Report"), pp. 1, 4.

33. MacLachlan Letter.

34. Ramsay Report, p. 3; Galloway, p. 164.

35. William Boss, "Battle Drill Training," CMHQ Report No. 123, 31 Aug 1944 (DHH), para 2. For more on battle drill, see John A. English, *The Canadian Army and the Normandy Campaign: A Study of Failure in High Command* (New York: Praeger, 1991), Chapter 5; Timothy Harrison Place, *Military Training in the British Army, 1940–1944: From Dunkirk to D-Day* (Abingdon, Oxfordshire: Routledge, 2000), pp. 49–79; Timothy Harrison Place, "Lionel Wigram, Battle Drill and the British Army in the Second World War," in *War in History* 7, No. 4 (2000), pp. 442–462; Tremblay, pp. 189–207, pp. 209–214; and R. Daniel Pellerin, "Battle Drill Comes to Canada, 1942–1945," in *Canadian Army Journal* Vol.16, No.1 (2015), pp. 49–69.

36. Campbell Diary, attached notes.

37. MacLachlan Letter.

38. Campbell Diary, attached notes.

39. LAC, RG 24, vol. 12701, file 18/N. Africa/1: Maj A. B. MacLaren (Adjutant, Records, CMHQ), "'Q' List Battle Casualty Return," 30 Jul 1943; Stacey, CMHQ Report No. 95, amendment 1, paras 2–3.

40. Both men returned to their home units and went on to fight in Italy that summer. After the war, Galloway authored several wartime memoirs: in addition to *With the Irish against Rommel*, he wrote *The General Who Never Was* (Belleville, ON: Mika, 1981), *Some Died at Ortona: The Royal Canadian Regiment in Action in Italy 1943; A Diary* ([London, ON]: RCR, [1983]), and *Sicily to the Siegfried Line: Being Some Random Memories and a Diary of 1944–1945* (Kitchener, ON: Arnold, 1995). Campbell went on to be a company commander during the invasion of Sicily. His account of his experience there can be found in Maj A. R. Campbell and Capt N. R. Waugh, "The Hasty Pees in Sicily," in *Canadian Military History* 12, No. 3 (2003), pp. 65–71.Tragically, Campbell was killed on Christmas Day, 1943 while leading his company in an attack at Ortona (see Farley Mowat, *The Regiment*, 2nd edition. (Toronto: McClelland and Stewart, 1973), pp. 58, 60, 79, and 159, and *And No Birds Sang* (Toronto: McClelland and Stewart, 1979), pp. 78, 110–111, 249–250).

41. See Wilfred I. Smith, *Code Word CANLOAN* (Toronto: Dundurn, 1992).

US Defense imagery, photo DF-SN-83-01207

A right side view of two vehicle-mounted Soviet SS-5 *Skean* medium range ballistic missiles

The Missiles of Anadyr: Soviet Cold War Plans That Could Have Included the Destruction of RCAF Station Comox, 1962–1969

by Sean M. Maloney

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Introduction

For the bulk of the Cold War, the Canadian and American populations possessed an acute but undefined sense of the nuclear threat. This unease expressed itself in civil defence exercises, elaborate military alert exercises, and, to some extent, through early efforts at anti-nuclear activism. Public commentary focused upon gaps, be they bomber or missile, and upon a variety of crises that had nuclear potential. The most obvious case in point was the Cuban Missile Crisis of 1962, which focused the world's attention upon the Caribbean and the eastern seaboard of North America.

In Europe, there was a more immediate sense of the threat from the Soviet Union and the Warsaw Pact. Berlin was surrounded. The Inner-German Border, better known as the Iron Curtain, was a visible reminder of the issues at hand. It was known by Western Europeans that they were outnumbered by Warsaw Pact conventional forces, and that tactical nuclear weapons would probably have to be used to repel Pact forces if the situation required it.

The Pacific Northwest, however, was a strategic backwater with almost no public attention directed towards it. The romance of Alaska, and, by extension, its Cold War proximity to the Soviet Union, was much more prevalent in popular culture in the early years, but this slipped away as the Cold War progressed. Yet, in the late-1950s and early- 1960s, there were *significant* if low key developments undertaken by the Soviet Union that put this region 'under the mushroom cloud,' as it were. If nuclear war had erupted, the Soviet and Canadian/American forces in the region would have fought their own virtually private war between themselves, disconnected from Washington DC and the Atlantic sea lanes, remote from the access routes to Berlin, and far away from NATO's Central Region. *Why* and *how* was this the case? And why was such a dire situation nearly overlooked during the dangerous crisis years of the early-1960s?

In 1962, a US Lockheed P2V *Neptune* patrol aircraft overflies a Soviet freighter during the Cuban missile crisis.

Fidel Castro and Nikita Khrushchev, 1962

A Myasishchev M-4 (Mya-4) *Bison*

Christening the Ground: The Soviet Base Complexes in the Far East

The Alaska-Pacific Northwest region constituted a distinct arena of the Cold War. Canadian-American war plans in the late-1940s conceptualized Alaska as the front line if war had erupted over the Berlin crisis, and later, the Korean crisis. Various scenarios, including the possibility that Soviet airborne forces might seize bases in Alaska and then rain V-2-like missiles or launch B-29-like bomber aircraft equipped with nuclear weapons onto the lower mainland existed. As a result, intense American aerial surveillance operations were mounted *up to* and even *into* Soviet airspace, from the Chukotsky peninsula, down along the Kamchatka peninsula, the Kuriles, and then to Vladivostok. These flights searched for early warning radar systems, bomber and fighter bases, and collected aerial samples of nuclear debris from Soviet tests. Importantly, the flights confirmed that the Soviet base areas tended to be clustered around Vladivostok and Petropavlovsk. There were no indicators that extensive logistic preparations had been made in the region to launch an attack on North America from this area at the time.[1]

However, with the advent of U-2 reconnaissance overflights starting in 1956, better coverage revealed important changes. Partly in response to the increased bomber capabilities of the Strategic Air Command (SAC), and partly in response to Soviet jet bomber developments, significant interest was directed by the Soviets at eastern Siberia as a venue to strike North America and defend the Soviet Union. That manifested itself in the improvement of existing airfields, and the construction of new airfields. The closest one to North America was a former Lend-Lease staging base located across the bay from a small port city named Anadyr.

By the late-1950s, the Soviet long range air forces were equipped with the TU-16 *Badger* medium bomber, which did not have the range to reach targets in the continental United States without forward staging or aerial refuelling. They could, however, reach Alaska, which, at the time, was essentially a large early warning apparatus and a support structure for SAC. Furthermore, SAC had an extensive aerial refuelling capability and was not dependent upon forward basing. However, elimination of Alaska with the TU-16 force would not have contributed to strategic success in a general war with NATO during, say, the 1958-1959 Berlin Crisis, or the 1961 Berlin Crisis.

Indeed, Soviet interests in the Far East were, at the time, more closely focused upon the Vladivostok-Sea of Japan-Kuriles theatre. There were American nuclear capabilities in Japan, Korea, and in the Pacific, and they had assigned targets in the Vladivostok area, as well as in China and in North Korea. A cluster of airfields in and around Vladivostok hosted three Heavy Bomber Regiments equipped with TU-16, some nine squadrons. The 12th Main Directorate of the Ministry of Defence (12th GUMO), the organization that handled the custody and control of Soviet nuclear weapons, had storage facilities in Primorsky and Khabarovsk.[2]

> **"By the late-1950s, the Soviet long range air forces were equipped with the TU-16 *Badger* medium bomber, which did not have the range to reach targets in the continental United States without forward staging or aerial refueling."**

As the 1950s progressed, the intercontinental Tupolev TU-95 *Bear* and the Myasishchev Mya-4 *Bison* bombers were deployed, mostly to bases in the interior of the Soviet Union. At varying levels of alert, several airfields on the perimeter of the Far East, called 'bounce' airfields in Russian terminology, would receive bombers for staging against distant targets.

One airfield designated as a 'bounce' airfield was Anadyr, located on Chukotsky peninsula. By 1958, Anadyr hosted a detachment of MiG-19 interceptors from the 529th Fighter Aviation Regiment, and, in the hills above the community, a radar station for early warning and interception from the 75th Radio-Technical Regiment was built. Tucked away in a valley several miles east of the airfield, a base capable of housing a brigade's worth of personnel was also established. This facility, however, was actually under the control of the 12th GUMO. In great secrecy, tunnels were excavated under the adjacent hills, and nuclear bombs for the bomber force were moved in and secured there.[3] There is no indication that the American intelligence apparatus was aware of the existence of "Objekt Gudym" (as the facility was known in the USSR, after the nearby town) at the time, or even well into the 1960s.

In March 1958, soon after the completion of the new facilities at Anadyr air base, a pair of TU-16 *Badgers* was suddenly detected by radar stations as they paralleled the coast of mainland Alaska over international waters. USAF F-102 interceptors on alert at Galena air field scrambled, but were unable to intercept them. These Soviet *Badger* flights continued sporadically, but the limitations of the F-102 prevented interception. The first successful interception and observation of Soviet bombers by the F-102 squadrons in Alaska did not occur until 5 December 1961.[4]

The introduction of Soviet nuclear ballistic missiles in the Far East occurred with the activation of the "57th Artillery Range Administration," a cover name for the 9th Independent Missile Corps based in Razdolnoye, in a large valley north of Vladivostok. (The unit shed its secret identity in 1961.) Its primary operational unit was the "652nd Engineer Division," a cover name for what was eventually designated the 45th Missile Division. This organization was equipped with four different types of intermediate and medium-range ballistic missiles. The rapid pace of technological change resulted in the phased and overlapping deployment of the R-5M Intermediate Range Ballistic Missile (IRBM) (AKA SS-3 *Shyster* to NATO), the R-12 IRBM (SS-4 *Sandal*), the R-14 Medium Range Ballistic Missile (MRBM) (SS-5 *Skean*) and R-14U MRBM (a silo-based version of the R-14) to Razdolnoye and vicinity between 1959 and 1962. All carried warheads that yielded between 1 and 2.5 megatons. These systems were targeted against American nuclear-capable air bases in Japan, Guam, South Korea, and later, against China. However, none of these systems could reach North America from their launch pads near Razdolnoye.

Indeed, these early missile systems were fairly vulnerable. The liquid-fuelled rockets were stored on transporter-erector trucks in bunkers, and were then deployed to a fixed concrete pad

during an alert. The arm of the vehicle raised the missile, which was then attached to the pad, the fuel was loaded, and finally, the missile was launched. The time to load the missiles with fuel was substantial, and if the missiles were subsequently taken off alert, they had to be defueled. The R-14U was silo-based, and a better variant of this missile.[5]

Operation *Anadyr*: Deception Everywhere?

The narrative of the decision-making process that led Nikita Khrushchev and the other Soviet leaders to station R-12 and R-14 ballistic missiles and their megaton-yield warheads in Cuba is well-known. A combination of factors convinced Khrushchev that this course of action was necessary to preserve Soviet prestige and to protect the emergent 'socialist' world, as epitomized by Fidel Castro's Cuban revolution. In early May 1962, a plan to deploy Soviet conventional weapons and forces to Cuba was mooted, but it was during a trip to Bulgaria on 11 May that the idea of including nuclear weapons emerged. After extensive discussions on 20 May, followed the next day by a meeting of the Presidium, the decision to mount this operation

> **"Soviet operations were traditionally mounted with whole catalogues of deceptive measures."**

was taken. The Ministry of Defence, already leaning forward, had a plan ready to go.[6]

Soviet operations were traditionally mounted with whole catalogues of deceptive measures. The mobilization of so many resources, and particularly missile-oriented resources, demanded a suitable distraction. The central focus for the Cuban venture was the air base at Anadyr. Personnel were told they would be going to a 'cold place' and given winter gear and training. By the end of May 1962, the whole operation was allocated the code-name *Anadyr*.[7]

Beyond this minor discussion, none of the plethora of books dealing with the Cuban Missile Crisis mentions any activity in Anadyr itself in relationship to the operation, just that the name was used for deception purposes.

However, there appears to have been more to Operation *Anadyr* than meets the eye. In June 1962, the 45th Missile Division, stationed near Vladivostok, activated the 83rd Missile Regiment. Four waves of transport aircraft delivered four R-14 (SS-5 *Skean*) ballistic missiles, their ground support equipment and personnel to the Anadyr air base.[8]
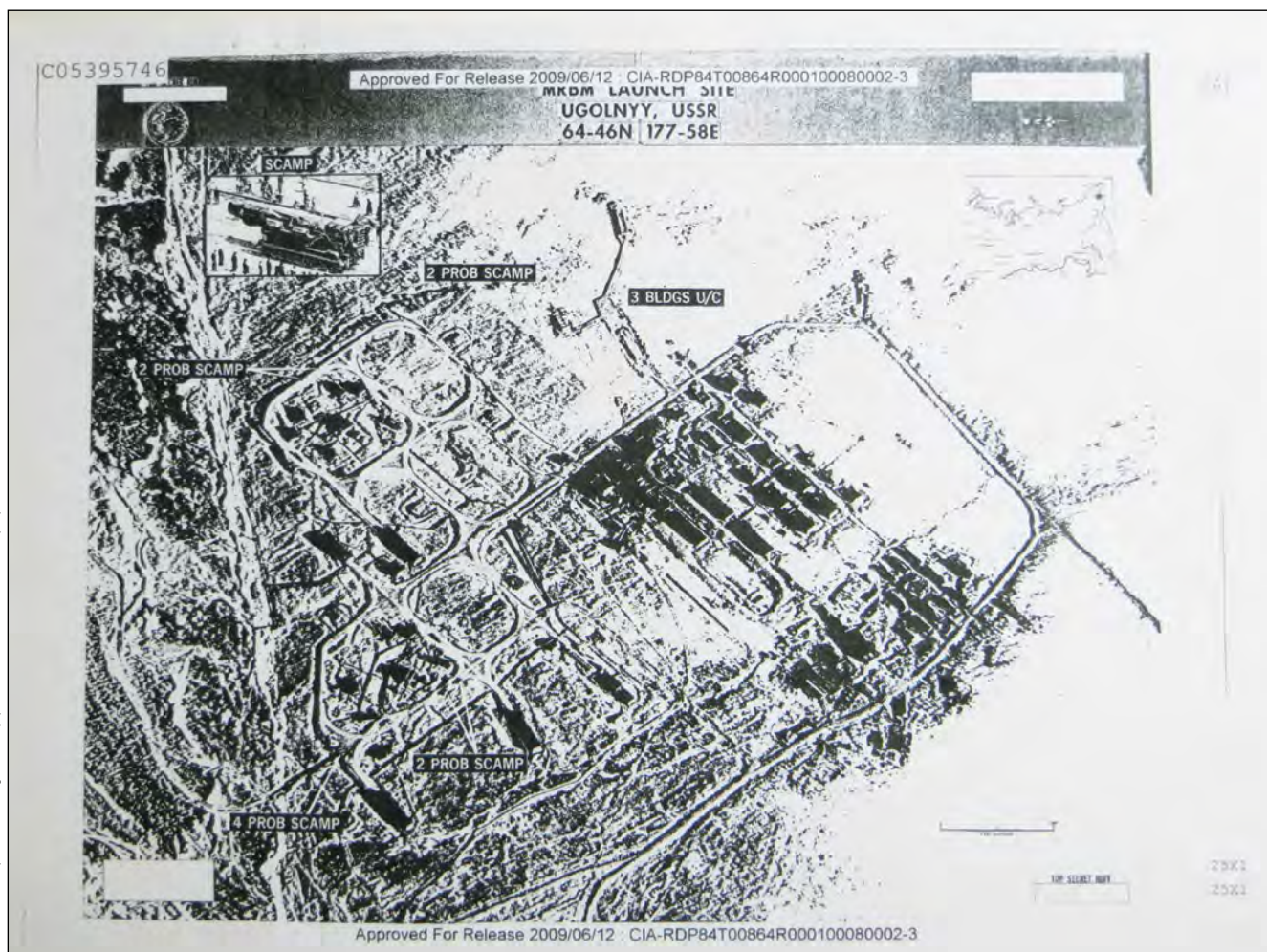
Declassified by the CIA, this image shows the ballistic missile launch sites for R-14 (SS-5 *Skean*) missiles at Ugoln'yy, taken in 1966 by an NRO KH-7 *Gambit* satellite equipped with a high resolution spotting system. (Source declassified under the Freedom of Information Act, 2015.)

The 83rd Missile Regiment occupied a special facility constructed in a valley east of the domestic site and the 12th GUMO-controlled nuclear weapons storage facility. This site was called Ulgoln'yy, named after the town near the air base, and it was not referred to as Anadyr. It consisted of over thirty structures, but the most relevant ones for our purposes here are four concrete launch pads and four large concrete Nissen Hut-like buildings. These buildings could each hold one transport-erector vehicle with one R-14 missile mounted on it. Each of these alert buildings had an associated building that was roughly one-third larger than the alert buildings. These were likely used for additional missile storage. The capacity of the Ulgoln'yy site appears to have been eight-to-twelve R-14 MRBMs, each carrying a 2.3 megaton yield warhead.[9]

Of parenthetical note, the 762nd Anti-Aircraft Missile Regiment equipped with the SA-2 *Guideline* surface-to-air missile (SAM) established itself in Shakhtyorskiy, a small settlement between the air base and the radar station at the same time the R-14 unit arrived in 1962.[10] The missile launchers themselves were spread out in a line on a bluff east of the radar station.

When exactly the Ugoln'yy ballistic missile site achieved alert status with its R-14s is unclear. One official Russian source claims that it was not declared ready for combat duty until January 1964.[11] However, *which* R-14s the official sources are referring to is blurred. One of the Russian sources suggests that the Ugoln'yy site was, in fact, the second site, implying that a more rudimentary facility was available temporarily until it was completed.[12] Therefore, does the official Russian combat readiness date of January 1964 refer to the first R-14s deployed in June 1962? Or does it refer to the completion of the Ulgoln'yy facility and its readiness?

Like a Matrushka Doll, it is entirely possible that there were multiple and concurrent Soviet deceptions in play in the summer of 1962. The June deployment to Anadyr by the 83rd Missile Regiment and its construction may have been part of the deception plan for Operation *Anadyr*. U-2 and other reconnaissance flights would see activity associated with missiles in Anadyr and conclude that any mention of Operation *Anadyr* in other sources related to this activity and not to what was happening in Cuba.

But what if there was more to the Anadyr missile deployment? American estimates on the ranges of the R-12 and R-14 were off by nearly 22 percent. Charts used in briefings for that crisis reflected CIA range estimates. The *actual* range for the systems was 2080 kilometres and 4500 kilometres respectively.[13] Based in Cuba, the R-12 could cover approximately three-quarters of the United States, and the R-14 could cover practically all of them. Washington state, however, was at the outside edge of the operating envelope for the R-14, and it was possible that accuracy would be seriously reduced. However, if they were based in Anadyr, the R-14s could provide overlapping coverage of several targets if necessary. The possibility that the Anadyr R-14s had both a deceptive *and* an operational function should not be discarded either.

What did the Americans know and *when* did they know it? Anadyr in its forward interceptor base form with its radar, air base, and SAM sites, was known. A reconnaissance project called *Congo Maiden* involving U-2 aircraft based in Eielson AFB in Alaska used "long range oblique photography…against Soviet Arctic Coastal objectives." These were supplemented with eight monthly sorties of RB-47 aircraft "flown…around the Soviet Arctic periphery from Petropavlovsk…to Novaya Zemla in the Barents Sea."[14] These flights were curtailed after the May 1960 U-2 shoot down, but were resumed by President Kennedy in February 1961.[15] A U-2 subsequently overflew Sakhalin Island on 30 August 1962, which generated Soviet protests.[16]

Oblique imagery of the domestic site would not necessarily have revealed the existence of the underground nuclear storage facility. A 1971 CIA analysis of Soviet 'peripheral strike forces' noted the existence of the Ugoln'yy missile site, identified it by that name, and suggested it had been built "in the early-Sixties."[17] Declassified imagery of the Ugoln'yy R-14 missile site dates from 1966.[18] However, it is entirely possible that the existence of Ulgoln'yy was not known to the Americans in 1962-1963.

Going to War with the 83rd Missile Regiment

What would the Soviet leadership have gained by deploying R-14 ballistic missiles to Anadyr? There are a number of possible advantages. Until the mass deployment of reliable ICBMs in the mid-to-late-1960s, the missiles of Anadyr supplemented the contemporary R-16 (SS-7 *Saddler*) Intercontinental Ballistic Missile (ICBM) force as it was slowly deploying. There were not enough R-16s to go around, and if the shorter-range IRBMs could cover some of the targets, so much the better. Another advantage was that the deployment was discrete, and it was located on Soviet territory. If 'push came to shove' over Cuba or Berlin in 1963, this capability was unnoticed by American forces, and therefore, could have wreaked some havoc within carefully defined limits.

The main limitations of the system revolved around the readiness of the missile itself. The relevant figures for the R-14 are not available, but those for the R-12 *are* available, and they were probably similar. There were four readiness states, 4 through 1. For the R-12, the preparation times were 205 minutes from State 4; 140 minutes from State 3; 60 minutes from State 2; and 30 minutes from State 1. Most of this time was absorbed by the fuelling procedure.[19]

Release of the weapons was closely held and extremely centralized. A somewhat alarming CIA analysis conducted in early-1962 noted that:

> The Soviets have already taken steps to speed up the process of making the decision to go to war as well as the implementation of that decision. These steps include the assignment of the strategic missile forces to a Supreme High Command which exercises exclusive control over their deployment and use, and the placing of Khrushchev at the head of the country's strategic arm in the post of Supreme High Commander. This post, we think, enables Khrushchev personally, without prior consultation with the ruling collegium, to push the war button.[20]

The same study provides a cogent discussion with respect to Soviet nuclear strategy. In effect, there were three choices: retaliation; first strike; and pre-emption. The bulk of Soviet literature, and a wide variety of intelligence, led CIA analysts to conclude that the Soviets favoured a pre-emption strategy in the early-1960s. If it looked like the United States and her allies were going to attack first, either with conventional or nuclear forces, the Soviets would, if they had the appropriate information, launch first with an aim to taking out as many nuclear systems as possible that were targeted at the Soviet Union.[21] As an aside, agents in the United States military in the employ of Soviet intelligence services were required to report on the change of Defence Conditions (DEFCONs) as one of their priority tasks.[22]

The number of missiles at the Ulgoln'yy site, and the range of the system, tell us in a general sense how they would be employed. The potential target sets within that range break down into three clusters. As a sidebar, we must dispense with a Mercator projection and adopt a conic view of the region to fully illustrate this thinking.

The first target set was in Alaska. Strategic Air Command used Eielson Air Force Base for tanker support to the Airborne Alert force B-52 bombers orbiting over the Arctic. One of three Ballistic Missile Early Warning System (BMEWS) radars was situated at Clear, Alaska. Elimination of Clear would blind NORAD to subsequent Soviet ICBMs launched after the site was eliminated. On the other hand, and it is unclear if the Soviets understood this possible consequence, destruction of a BMEWS site might have been enough to generate DEFCON 1, the highest state of readiness. US Air Force SAC aircraft, KC-135 tankers in the case of Clear, would be situated in orbits on a 24 hour basis if DEFCON 3 was declared to observe the Clear sites and report to SAC Headquarters in Omaha if it was destroyed.[23] Similarly, there was a *Midas* missile launch detection satellite downlink at Fort Greely. Its elimination would also interfere with NORAD's ability to track an incoming missile attack.

Interceptor forces in Alaska in the early-1960s consisted of two augmented F-102 *Delta Dart* fighter squadrons based at Elmendorf and Ladd Air Force Bases, with four forward deployment bases, each capable of handling a pair of aircraft. There was a NORAD air defence control centre located at Elmendorf. Some thirty radar sites were situated in Alaska along the Aleutian Chain, the Prudhoe Bay-Point Barrow coast, and in the interior of the state.

The second target set was located on Vancouver Island. Any bomber force that made its way through or around the Alaskan air defence network would have been confronted with the CF-101 *Voodoos* of 409 Tactical Fighter Squadron stationed at RCAF Station Comox, directed with information collected by the radar site at RCAF Station Holberg. These interceptors were conventionally-equipped before 1964, but plans existed to deploy MB-1 *Genie* nuclear air-to-air rockets to them in an emergency.

The third target set was in Washington State. The main NORAD Semi-Automatic Ground Equipment (SAGE) control centre was located at McChord Air Force Base, which also hosted two squadrons of F-106 *Delta Dagger* interceptors capable of employing nuclear air defence weapons. Two more interceptor squadrons were stationed at Adair Air Force Station in Oregon, and Larson AFB near Moses Lake, Washington. Washington State also hosted SAC units: Fairchild AFB and Larson AFB were B-52 *Stratofortress* bases. Also situated around Moses Lake were nine *Titan* I ICBM silos, grouped in threes. And arrayed outside of Fairchild were ten *Atlas* E ICBMs in 'soft' sites.

Finally, there were other strategic facilities in the state. These included Hanford, Washington. The Atomic Energy Commission's reactors located there were responsible for plutonium

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DND/CFJIC photo CXC77-1944

Two CF-101 *Voodoos* from 409 Squadron, Comox

production for the entire American nuclear arsenal. The massive Boeing plant was located in Seattle, and there was a substantial US Navy base at Bremerton, as well as facilities in the Seattle area.

The Soviet tendency towards pre-emption gives us a clue as to how the R-14 missiles would have been employed in the early-1960s. High-level Soviet documentation assessed by CIA in 1962 suggested that: "…nuclear missile weapons must be used suddenly, effectively, purposefully and *en masse*," and were "… designed to perform the leading role in the initial period of war." [24] In effect, missiles were to be employed first, and manned bombers second. As for targeting priorities, the then-highly-classified Soviet "Information Bulletin of the Missile Troops," first published in July 1961, discussed a priority list for 'targeteers:' [25]

- strategic missile launch sites;

- sites for the production, assembly, and storage of nuclear weapons and of means for delivering them to the target;

- large airfields, air force and naval bases;

- centers of political administration and of military industry;

- large communications centers;

- large factories and power centers;

- arsenals and depots with strategic stocks of armaments military equipment, or strategic raw minerals; and

- strategic reserves and other targets of strategic significance in the deep rear of the enemy.

The capacity of the Ugoln'yy site, however, was less than the number of potential targets in the priority list. Ugoln'yy's four alert R-14s and between four-and-eight reloads would not have been enough to take out the nine dispersed *Atlas* E sites near Spokane, let alone the three clusters of *Titan* I silos near Moses Lake. The 2.3 megaton yield warhead on the R-14 was, according to Russian sources, only useful against surface targets.

As for the second priority, a single R-14 with a 2.3 megaton warhead would have been able to destroy Hanford completely. The assessed accuracy of the R-14 was 5 kilometers. [26] As for the third, Larson and Fairchild AFBs, and possibly Eielson AFB, would have probably been candidates for targeting. The bases at Comox, Elmendorf, and McChord would also rank. And a single warhead over the Seattle area was capable of generating significant damage to multiple facilities.

> **"The Soviet tendency towards pre-emption gives us a clue as to how the R-14 missiles would have been employed in the early-1960s."**

Given the 1961 targeting priorities, the capacity of the Ugoln'yy site, the reload time for the second and possibly third wave of R-14 missiles, and the extant pre-emption doctrine, while the following scenario is purely speculative, a *possible*, indeed, *plausible* sequence of events could have looked like this:

The Ugoln'yy R-14s are used to clear the way for a coordinated R-16 ICBM strike against Strategic Air Command targets. This would mean hitting the BMEWS radars at Clear, Alaska and the Missile Defense Alarm System (MIDAS) detection satellite downlink at Fort Greely with

two R-14 missiles each to ensure a high probability of kill. The flight times from Ugoln'yy to Alaska would be less than fifteen minutes. The 565th, 570th, and 772nd Missile Regiments, based around Svobodnyy in the Amur Oblast deeper in the Soviet Union, launch a volley of eighteen R-16 ICBMs: three are directed against Eielson, Larson, and Fairchild Air Force Bases with 5 megaton yield warheads (accuracy: within 3 kilometres of the point of aim) to take out bombers and nuclear storage sites on the ground, while fifteen more R-16s are launched against the *Titan* I and *Atlas* sites in the Spokane-Moses Lake area. The plumes from the fifteen 5 megaton-yield warheads detonating in eastern Washington State would have blanketed south-eastern British Columbia and southern Alberta with significant amounts of radioactive fallout, with some contours in lethal dosages.

On re-loading the site with the next four R-14s (after 1.5 to 2 hours), interceptor bases at Elmendorf, Ladd, Comox, and McChord are struck. This destroys the SAGE air defence computer at McChord and the manual operations centre at Elmendorf. Any interceptor forces still on the ground at Elmendorf would have been incinerated, and the McChord special ammunition storage site containing MB-1 missiles for the USAF and RCAF would have been destroyed. If the CF-101 *Voodoos* had not yet been launched or dispersed to smaller air fields, such as Port Hardy or Tofino on Vancouver Island, or RCAF Station Puntzi Mountain in the interior, they would have been destroyed along with the special ammunition storage site located at Comox.

If the missile designated for Comox missed, and it *could* have missed up to five-or-more kilometers on a good day without any other induced error, it would likely have landed in the Strait of Georgia, due to its trajectory from Ugoln'yy. The detonation of a 2.3 megaton yield weapon off Vancouver would have generated a base surge of radioactive water into the city. A detonation *on* or *above* Comox would have left a crater about 1-5 to 3 kilometres in diameter, depending upon the height of the burst, spreading fallout throughout central British Columbia.

By that time, the TU-16 bombers from Vladivostok and the TU-95 and Mya-4 bombers based in the Soviet interior that have already dispersed to the 'bounce' airbases in the Kuriles and Anadyr have launched and are on their way to penetrate a fragmented and disrupted air defence system. Their targets would include Hanford, which is large, stationary and not protectable; the naval base at Bremerton with its nuclear submarines near Seattle; the Boeing plant and airfield; and possibly the Royal Canadian Navy base at Esquimalt, in case US Navy ships or submarines escaping their bases around Seattle sought refuge there. The large dams on the Columbia River might also have been another target.

Two Convair F-106 *Delta Dart* fighter interceptors of the United States Air Force

Other large airfields in the region that might act as refuges for SAC's bombers or NORAD interceptor aircraft would likely be attacked: Vancouver, for example, was a candidate because of the presence of RCAF Sea Island (now the site of Vancouver International Airport) and its large runway, and its reserve F-86 *Sabre* fighter squadron. Free fall bombs in the megaton yield range directed at Esquimalt and Sea Island would have destroyed Victoria and devastated Vancouver.

These bombers would have had to contend with the comparatively ineffective F-102 force dispersed in pairs to remote airfields in Alaska, then the more effective CF-101s dispersed from Comox, and then any remaining nuclear-equipped F-106 interceptors left in the Seattle area that escaped the McChord strike. The loss of the SAGE bunker at McChord and the control centre in Elmendorf, Alaska, would have seriously attenuated any NORAD response to the incoming bombers. The radar system, which would have included RCAF Station Holberg and RCAF/USAF Station Puntzi Mountain, and perhaps the Makah Air Force Station site at Neah Bay in Washington, would have been left untouched and in a position to direct the remaining fighters. That is, at least until the advent of Soviet ICBMs in substantially greater numbers as the 1960s progressed.

Note that Canadian targets would have been attacked regardless of whether Canada was party to the crisis that generated the attack or not. There is no neutrality in nuclear war.

However...

If the Soviets chose this course of action, there were a number of variables that require examination. The first of these was *Chrome Dome*, SAC's Airborne Alert Force. This consisted, in 'peacetime,' of 12 B-52 bombers (most of them built, ironically, by Boeing in Seattle) kept aloft 24 hours a day via aerial refuelling. These B-52s would have been augmented as a crisis progressed, initially up to 65 aircraft. One track for the Airborne Alert Force took six B-52s up the Pacific Coast, out to the tip of the Aleutians, up to the North Pole, and back.[27]

In the early-to- mid-1960s, the SAC B-52 force was equipped with a variety of nuclear weapons. The first configuration was two Mk 15/39s (yield: 1.7 megatons each) and the second was four Mk 28Y1R1 (yield: 1.1 megatons each).[28] The aircraft also carried a pair of AGM-28 *Hound Dog* cruise missiles which were usually employed for SAM suppression. The yields of these weapons were set at around 1-to-4 megatons each. The range of the *Hound Dog* was 785 miles, or 1263 kilometres.[29]

The probability that one of the alert B-52s cruising up and down the Alaska-Soviet boundary was assigned to target the 762nd Anti-Aircraft Missile Regiment's SA-2 missiles was high. This site was well within range of *Hound Dogs* launched from a B-52 bomber inside American airspace. A 1 megaton airburst over the SA-2 launcher sites would have destroyed the radar site above the town as well. The MiG-19 interceptors may have already been launched from the Anadyr air base, but would have had a tough time tracking and intercepting the airborne alert B-52s with their centralized control destroyed.

Prior to 1963, the SAC targeteers would not have known about the Ugoln'yy R-14 site. They did not know about the nuclear storage tunnels. The *Hound Dog* strike would have been conducted to facilitate the airborne alert B-52s' penetration of Soviet airspace to hit targets deeper in the interior.
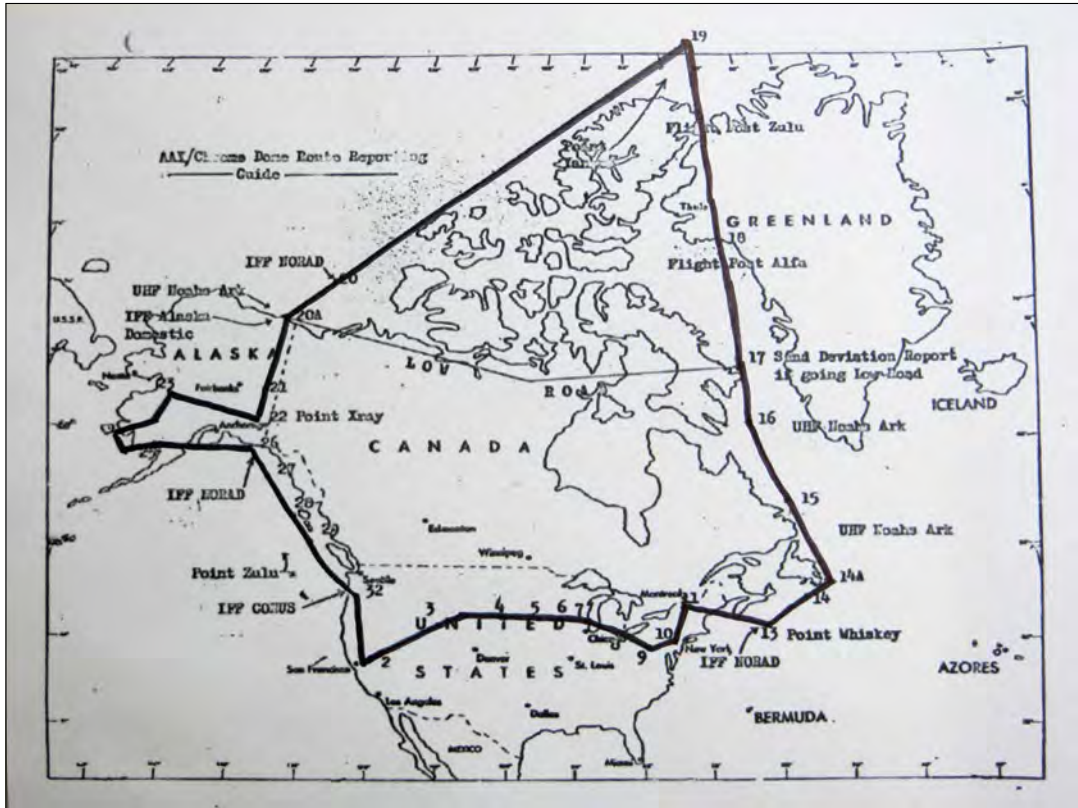
This map depicts the northern *Chrome Dome* B-52 routes with communications check-in points. Six pairs of B-52 bombers each equipped with six nuclear weapons flew this route in a counter-clockwise direction daily. The dog leg to the west over Alaska placed the aircraft within cruise missile range of Ugoln'yy and its facilities.

A B-52 *Stratofortress* with air launched *Hound Dog* cruise missiles under each wing

That said, SAC targeteers would have known that the Anadyr air base was large enough to accommodate TU-16 and TU-95 bombers. That fact alone would have dictated targeting it. At the time, the main American nuclear war plans, SIOP-62 and SIOP-63, used the principle of cross targeting. The objective was to destroy any given target with a probability of nearly 100 percent. Not all American nuclear systems had a100 percent reliability, and thus, several megaton-yield weapons would have been employed against the Anadyr air base to ensure its destruction. For example, the *Titan* I and *Atlas* E ICBMs in Washington State had a reliability rate at the time of only about 50 percent.[30] Thus, two or even three missiles from different bases would be assigned to one target 'island.'

A likely engagement scenario for the Anadyr area prior to the discovery of the Ugoln'yy site might have included the *Hound Dog* strike or strikes on the SAM and radar site, plus a gravity bomb on the airfield, plus a pair of ICBMs against the airfield. In effect, four megaton-yield weapons would have been directed at the area with the hope that two got through. Given the distance from the Ugoln'yy R-14 site to the air base, or to the air defence base,

and the fact that it was located in a valley, it is entirely possible that the Ugoln'yy R-14s would have escaped serious damage or destruction, and the facility could have continued with its activities, 'depending upon the breaks.' Certainly, the 12th GUMO storage facility would have escaped destruction unless directly targeted with a ground-burst thermonuclear weapon.

Once the National Reconnaissance Office's *Corona* and *Gambit* satellites identified Ugoln'yy, however, its fate was sealed if war had occurred. A single *Hound Dog* from a passing B-52 would have utterly destroyed the 'soft' site with a 1 megaton air-burst, but it is likely that Ugoln'yy itself was allocated between three-to-five weapons because of the danger it posed. The question would have been whether zero, four, or eight R-14s were launched against their targets in North America. In any event, no matter what the scenario, the Anadyr-Ugoln'yy area would have been reduced to several flooded, radioactive craters very quickly. Just to make sure…

Ugoln'yy as it appears today. (Source: Google Earth)

NOTES

1. See John Farquhar, *A Need to Know: The Role of Air Force Reconnaissance in War Planning 1945-1953,* (Maxwell Air Force Base, AB: Air University Press, 2004). Thanks also to Allex Wallerstein's "Nukemap" site http://nuclearsecrecy.com/nukemap/

2. Michael Holm, a former member of the Royal Danish Air Force intelligence service who specialized in Cold War-era Soviet air order of battle maintains a site which correlates Western data with Soviet-era data. This outstanding resource is located at: http://www.ww2.dk/new/newindex.htm. The Order of Battle (ORBAT) for the 12 Главное Управление Министерства Обороны (12th GUMO) is at: http://www.ww2.dk/new/rvsn/12gumo.htm

3. Travellers to the region have entered and photographed this abandoned facility. See "Gudym, la base nucleaire secrete de l'ex-URSS," at http://www.svalbard.fr/nouvelle-polaire/Gudym-base-nucleaire-secrete-ex-URSS-2014_10.htm

4. John H. Cloe, *Top Cover and Global Engagement: A History of the Eleventh Air Force,* (Anchorage, AK: Alaska Quality Publishing, n/d), p. 24; "Attack Detection Prime Alaskan Role," in *St Petersburg Times,* 6 March 1962; FOIA Dwight D. Eisenhower Library [DDEL] "Memorandum of Conference with the President, August 9, 1960."

5. Screen shots from the Soviet documentary "Nuclear Weapons in Readiness for Use" depict this process with the R-14 and are located at http://militaryrussia.ru/blog/topic-379.html. Note that the equipment and vehicles employed are reminiscent of the *Corporal* missile system used by the United States and the United Kingdom.

6. Aleksander Fursenko and Timothy Naftali, *One Hell of a Gamble: The Secret History of the Cuban Missile Crisis,* (New York: W. W. Norton, 1997) pp. 171-181.

7. *Ibid,* p. 191; see also Anatoli I. Gribkov and William Y. Smith, *Operation ANADYR: US and Soviet Generals Recount the Cuban Missile Crisis,* (Chicago: Edition q, 1994) pp. 15-16.

8. This information is derived from four separate Russian internet forums dealing with the history of Strategic Rocket Forces and their systems. See http://rvsn.ruzhany.info/45rd/index.html "45 Missile Red Banner Division"; http://yasnay.ru See particularly post #503 31 January 2011 for discussion of deployment and construction at Anadyr in 1962; http://artofwar.ru/s/sukonkin_a_a/text_810.shtml has a superb article by Alex Sukonkin entitled "Strategic Missile Forces in Primorsky Krai." Note that the Russian Wikipedia entry for the R-14 missile differs from its Western counterpart in that it is significantly more detailed and based upon Russian secondary sources. See note 36 for the deployment dates of the R-14s to Anadyr.

9. Author's analysis of Google Earth imagery of the Ugoln'yy missile site. Note also that tourists visiting Anadyr have made their way into Ulgoln'yy, photographed some of the structures, and put them up on the internet.

10. 762-й зенитно-ракетный полк (762nd Anti-Aircraft Missile Regiment), at http://www.ww2.dk/new/pvo/sam/762zrp.htm

11. See http://rvsn.ruzhany.info/45rd/index.html "45 Missile Red Banner Division."

12. http://yasnay.ru See particularly post #503 31 January 2011 for discussion of deployment and construction at Anadyr in 1962.

13. Pavel Podvig, Russian Strategic Nuclear Forces (Cambridge: MIT Press, 2001), pp. 185-188.

14. FOIA DDEL, undated, "Briefing to President Eisenhower on current status of aerial reconnaissance programs which are conducted proximate to Communist territory."

15. FOIA SECDEF, National Security Action Memorandum No. 24: RB-47 Reconnaissance Flights," 27 February 1961.

16. FOIA CIA memo to DCI, "CIA Handling of the Soviet Build-up in Cuba, 1 July-16 October 1962," 14 November 1962.

17. FOIA CIA Intelligence report SR IR 71-5, "Soviet Strategic Forces for Peripheral Strike," May 1971.

18. See 83-й ракетный полк (83rd Missile regiment) imagery from US sources at http://www.ww2.dk/new/rvsn/83mr.htm.

19. Pavel Podvig, *Russian Strategic Nuclear Forces,* (Cambridge, MA: MIT Press, 2001), p. 185.

20. FOIA CIA Office of Current Intelligence," CAESAR XVI-62: Soviet Strategic Doctrine for the Start of War," 3 July 1962.

21. *Ibid.*

22. This emerged during the John Walker spy case. See Philip Shenon "Arthur Walker Sentenced to Life; Wider Spying role hinted by U.S.," in *The New York Times,* 13 November 1985, at http://www.nytimes.com/1985/11/13/us/arthur-walker-sentenced-to-life-wider-spying-role-hinted-by-us.html

23. FOIA USAF "History of the 6th Strategic Wing October-December 1969."

24. FOIA CIA Office of Current Intelligence," CAESAR XVI-62: Soviet Strategic Doctrine for the Start of War," 3 July 1962.

25. *Ibid.*

26. Podvig, p. 188.

27. FOIA USAF "Strategic Air Command Operations in the Cuban Crisis of 1962 Historical Study No. 90 Vol. 1."

28. *Ibid.*

29. Bill Yenne, *B-52 Stratofortress: The Complete History of the World's Longest Serving and Best Known Bomber* (Minneapolis, MN: Zenith Press, 2012), pp. 64-66.

30. See commentary by retired USAF Minuteman control officer Captain Phil C. Walton on early ICBM accuracy at http://nsaarchive.wordpress.com , 8 November 2011. "US War Plans Would Kill an Estimated 108 Million Soviets, 104 million Chinese, and 2.3 Million Poles: More Evidence on SIOP-62 and the Origins of Overkill."

Armistice Day, Dorchester Square, 11 November 1937

150 Years of Military History in Downtown Montreal

by Diane Joly

Introduction

In Montreal at the turn of the 20th Century, multiple visions of Canada co-existed. Some citizens, mainly Anglophones, viewed Canada as a colony with a duty to contribute to the prestige of Great Britain. Others, mostly Francophones, saw it as an autonomous power within the British Empire. In the middle were the moderates, who wanted the two groups to get along and live together in harmony. Dorchester Square and Place du Canada are home to several commemorative monuments that illustrate those visions and, collectively, show how the site originally symbolized British power, but gradually came to reflect contemporary Canada and Montreal.[1]

Origins of the site

In 1795, burial of corpses was prohibited within the fortifications of Montreal, so the Parish of Notre-Dame purchased land outside the city walls to use as a graveyard. Montreal's dead were buried there until a new cemetery was opened on Côte-des-Neiges in 1854. Removal of the bodies from the original graveyard began, but serious public health concerns were raised, including fears of a cholera epidemic. The exhumations were stopped and the rest of the bodies were left in place; 10,000 of them still lie beneath downtown Montreal. In 1871, to beautify the area and encourage healthy recreation, the city fathers decided to create a public park on the site, to be named Dominion Square in honour of the 1867 Confederation of Canada.

The City decided to build the park within the same boundaries as the former cemetery. That explains the unique shape of the space: two rectangles, slightly offset, separated by René-Lévesque Boulevard. The ground is sloped, and the streets along its edges are irregular. Today, the northern section is called Dorchester Square; the southern section is Place du Canada.

From the time the park was opened, it has been associated with the military. The Fusiliers de Victoria brass band played concerts there. In addition, many military parades were held downtown, and all of them passed through the square. The idea of commemorating military heroes and victories was thus consistent with the identity of the site. In all, there are four elements commemorating military history at this location.

Gun from the Battle of Sebastopol, in Place du Canada, near René-Lévesque Boulevard. The cenotaph, erected in 1924, is visible in the background.

Guns from the Battle of Sebastopol

The Crimean War (1854–1856) was largely a struggle for influence between the major European powers of the time. The 39th Regiment of Foot, a British unit that had served in Crimea, was posted directly from there to Montreal, where it arrived in triumph in July 1856. To honour her soldiers' bravery, Queen Victoria presented the regiments that had fought in the war with guns seized during the conflict. Two guns were first displayed publicly in Old Montreal near the British troops' quarters, then moved to Dominion Square in the late-1870s, 1889, or 1892 (according to various sources).[2]

These artifacts, which were captured during the Battle of Sebastopol in Ukraine, are real artillery pieces consisting of a barrel and a base. The original wooden base was later replaced by a concrete replica. The guns are made of a bronze alloy and other metals. They were the first objects to be placed in the square.

Their materials, their old-fashioned design, and the eagles of the Tsar of Imperial Russia inscribed on the barrels link these guns to the past. As an example of 19th Century weapons of war, they evoke the stark reality of the battlefield during the conflicts of that time. These guns are also a reminder of Canada's former colonial status.

At the turn of the 20th Century, the guns of Sebastopol were a magnet for American tourists, who would see them as they exited the new Windsor Station. The tourists were keen to photograph the weapons, since it was rumoured in the United States that they had been used to repulse the American invasion.[3]

The impact of the Crimean War

Even though Canada played no role in the Crimean War, it affected Canadian military history in two ways. First, it provided the impetus for the modernization of the Canadian Army Reserve. When British troops posted in Canada were sent to the front, the government of the United Canadas had to call for 5,000 volunteers. The response exceeded that number, and from 1855 on, the Canadian militia, which until then had been conscripted and heavily influenced by politics, was reformed, becoming a single, official, voluntary organization.[4]

In addition, that conflict was the first to be reported in the newspapers. Dispatches described a number of acts of bravery, but those involved remained anonymous, since it was mostly British officers who received distinctions. In 1856, Queen Victoria changed that by issuing a royal decree creating the highest distinction of the armed forces of Britain and the Commonwealth: the Victoria Cross, to be awarded in recognition of acts of valour in the face of the enemy in time of war. The Queen stipulated that the distinction must be awarded without regard to the recipient's rank, religion, ethnic origin, or social status. The decoration, in the form of a cross with a crimson ribbon, bears the royal crown and the inscription "*For Valour*." Recipients have the right to use the letters "VC" after their name. Since its creation, 93 Canadian military personnel have been awarded this honour—some while living and some posthumously.[5]

Monument to the heroes of the Boer War. This is the only equestrian monument in Montreal, and one of only a few in Canada. It stands in Dorchester Square.

Personnel of Lord Strathcona's Horse en route to South Africa aboard S.S. *Monterey*, 1899

The Monument to the Heroes of the Boer War

The monument to the heroes of the Boer War was unveiled on 24 May 1907. That conflict was Canada's first military intervention of the 20th Century. The decision to participate in Great Britain's war against the Boers in South Africa seems to have been a reasoned decision. Britain wanted to defend the *Uitlanders,* British subjects living in the Boer colonies in South Africa. In October 1899, the Boers initiated hostilities by invading Natal and the Cape of Good Hope, which were in British territory.[6]

The Lord Strathcona's Horse

In Canada, not all members of the political class were in favour of sending troops to Africa. Many felt that the real motivation behind the conflict was control of South Africa's diamond and gold deposits. At first, Sir Wilfrid Laurier opposed Canadian involvement, but he was attentive to public opinion. He had taken stock of support for the war, and once it was declared, Ottawa quickly announced that Canada would participate.

In 1900, as the controversy divided the country, a rich businessman, diplomat, and philanthropist, Donald Alexander Smith, 1st Baron Strathcona and Mount Royal, offered to raise a cavalry regiment at his own expense. The members of the new unit were recruited in Canada, but they became part of the British Army. The Lord Strathcona's Horse recruited on the Prairies among cowboys, settlers, and mounted police officers. The recruits had to be unmarried, skilled horsemen, and used to 'roughing it.' Throughout the conflict, Lord Strathcona continued to make generous donations of equipment, including binoculars (which were essential for pathfinders), lassos, blankets, and boots.[7]

The regiment arrived in Cape Town in April 1900. The British Army took advantage of the members' outdoor experience by using them as pathfinders. Their remarkable work contributed to the success of the British troops. When they passed through England on their way home at the end of the war, King Edward VII gave back the regimental colours. Shortly afterwards, once they were back in Canada, the cavalrymen were demobilized. The Lord Strathcona's Horse (Royal Canadians) (LdSH[RC]) was stood back up, and is now part of 1 Canadian Mechanized Brigade Group, garrisoned at CFB Edmonton.

The monument

Baron Strathcona and Mount Royal was the driving force behind the monument to the heroes of the Boer War. Because Lord Strathcona was McGill University's biggest donor, the university's rector, an enthusiastic imperialist, tried to flatter him by proposing that a statue be erected in his honour. But Lord Strathcona refused, saying that it was more important to remember the soldiers killed in the war, and that another committee had already been formed for that project. In the end, the two committees merged and collaborated to produce a highly original monument honouring the war heroes' memory and Lord Strathcona's contribution.

Despite the differing views on the origin of the conflict, a united crowd attended the unveiling of the statue on Empire Day (the Queen's birthday). Before an estimated 28,000 people, including 3,000 soldiers, the rector of McGill University gave a speech that glorified the British Empire and Anglophones. His

Military parade in Dominion Square, Montreal, 1898

message was so unsubtle that the next speaker, the Mayor of Montreal, made a point of stating that all Canadians had a place in the Empire. He also reminded the audience that French Canadians had fought in the war.[8]

The nine-metre-high monument created by the artist Charles G. Hill and erected in 1906, cost $30,000. It is the only equestrian monument in Montreal, and one of only a few in Canada. It is a life-size bronze statue of a rearing horse and a young cavalryman leading it by the reins. There is a rolled-up blanket attached to the saddle. In the soldier's other hand, he holds a pair of binoculars, indicating his role as a pathfinder during the conflict.

The lower part of the monument is classical in design, with decorative elements, and resembles that of a typical cenotaph. At the four corners, the names of the Canadian regiments that participated in the conflict are inscribed: Royal Canadian Artillery, Canadian Montreal Rifles, Royal Canadian Infantry, and Strathcona Horse. An inscription on the west side of the monument reads as follows: "To commemorate the heroic devotion of the Canadians who fell in the South African war and the valour of their comrades." The east side of the monument bears the inscription "In grateful recognition of the patriotism and public spirit shown by Lord Strathcona and Mount Royal in raising and equipping a regiment of horse for service in South Africa as an evidence of his sympathy with the cause of imperial unity." On the south side is a list of the battles in which Canadian troops participated. Two *hauts-reliefs* depict heroic episodes: on the west side of the monument, the Battle of Paardeberg, where the Boers surrendered to the Canadian infantry, and on the east side, the Battle of Komati River–Belfast, where the Canadian artillery seized the enemy's rifles. Lastly, on the north side of the monument there is a medallion of Lord Strathcona with his coat of arms.

In the early-20th Century, it was the most photographed statue in Montreal. Today, its dated style and its English-only inscriptions imprison the work in the past.

In the years that followed, a commemorative ceremony with a military parade was held every February. According to a newspaper article in Montreal's municipal archives, the ceremony was still taking place in 1958, but not the annual military parade, because the veterans were too old. So, beginning in 1919, two military commemorations were held in Montreal each year, and that seems to have continued until the last veterans had died.

In Place du Canada, next to Rue de la Cathédrale, the classical lines of the cenotaph mark the end of the eclectic architecture popular at the turn of the 20th Century.

This sober monument, which stands in Place du Canada, has three super-imposed sections. The section above the base is ringed with a *bas-relief* of a garland of flowers that extends around the four sides of the monument. On the front surface of the upper section, a cross in *bas-relief* divides the English and French inscriptions: "To the glory of God and the memory of the immortal dead who brought us honour and peace"/"À la gloire de Dieu au souvenir des morts immortels à qui nous devons l'honneur et la paix." They are followed by the dates 1914–1918, 1939–1945 and 1950–1953. At the rear, sculpted in the monument's granite, is a sword with a wreath laid over it, indicating that the cenotaph is dedicated to the soldiers who died in combat. This classical monument is extremely simple. Its scale represents the immensity of the soldiers' sacrifice, while the purity of the forms evokes the void left by so many who did not return home. The cenotaph's unadorned style stands out from its Victorian surroundings; it signalled the end of the eclectic architecture typical of late-19th- and early-20th-Century Montreal. On 11 November 1924, veterans and bereaved families—more than 50,000 Montrealers and several thousand other people—attended the unveiling of the cenotaph. That day, a new protocol was introduced: when the guns were fired, the entire city of Montreal, including horse-drawn carriages, automobiles, streetcars, trains, factories, offices and passersby, stopped for two minutes to remember the fallen soldiers. The presence in the crowd of soldiers wearing Belgian, British and Italian uniforms testified to the universal nature of the ceremony.[9]

The Cenotaph

Following the Armistice in 1918, an international commission was created to ensure a decent burial for the deceased soldiers. The commission decided that no bodies were to be repatriated; European cemeteries became the field of honour. Because the bodies of the fallen were not sent home to be buried in Canadian soil, monuments were erected across the country, in every city or town that had lost some of its citizens, to commemorate the heroism of Canadian soldiers. In Montreal, it was decided to build a cenotaph dedicated to the men and women of the city, no matter what their origins.

Cenotaphs were among the first monuments erected in memory of contemporary soldiers. They did not become a widespread phenomenon until the end of the First World War, although a few earlier examples exist, such as the one in Dorchester Square.

Later, the symbolism of the cenotaph inspired other commemorative activities held by various communities in Montreal. For example, Ukrainians gathered at the cenotaph in 1993 to mark the 60th anniversary of the Great Famine in Ukraine; in 1988, Belgians celebrated the 157th anniversary of Belgium's independence. The Polish community celebrated their country's independence in 1991, as did the Greek community for a number of years.[10]

Return of the soldiers to Montreal

During the First World War, Montrealers were made aware of the realities of the conflict through newspaper reports, rationing, and the visibility of mourning family members and injured soldiers in public places. Many veterans came home physically and mentally damaged.

For Francophones, the Société Saint-Jean-Baptiste de Montréal (SSJBM) was the most important organization in Montreal and in French Canada. As many of its members returned home from the front, it introduced activities to help soldiers and their families, such as the Guignolée du Soldat charity drive to raise funds for conscripts and the war-wounded.[11]

After the war ended, the SSJBM opened its doors to returning soldiers twice a week. The organization was worried about what would happen to them. Many of the demobilized were unable to resume their former jobs, and others were plagued by psychological problems, which today are recognized as due in part to post-traumatic stress. To meet their needs, the SSJBM launched some original projects that are little known today, including a 'home away from home' for French-Canadian veterans.

A French-Canadian Hearth

In 1919, the SSJBM wanted to create a gathering place with a room arranged and decorated for the exclusive use of veterans, "A homelike setting that would be open to soldiers so that they could have an opportunity to relax, talk with civilians, and re-adapt to the French-Canadian way of thinking" [translation]. The President invited the society's members to come and spend their evenings with the soldiers. He asked bookstores to donate engravings of Canadian scenes; the Archambault music store provided a piano, a gramophone and records; and the Viau cookie factory contributed its products.

In order to "…give the compatriots an opportunity to relax, while taking a trip back in time, to better appreciate the good, old French-Canadian values" [translation], the SSJBM organized a French-Canadian night to "reawaken our compatriots' love of our traditions" [translation]. This old-fashioned evening, carefully researched to ensure authenticity, was one of the first events held in Montreal to initiate French Canadians to their cultural heritage through song, dance, and folktales, as well as a display of antique furniture and tools.

However, despite the society's efforts, the project was largely unsuccessful, and the correspondence in the archives sheds light upon why. The members frequently admitted that they were overwhelmed by the veterans' tears and their indifference to their environment. They were unable to form a bond with them and were asking for help. But the board members had no training for that kind of work, and the initiative was soon abandoned.

Honouring the living

The needs of the soldiers remained a matter of serious concern for the SSJBM. In June 1925, following the inauguration of the cenotaph and the impressive ceremony honouring the heroes the previous autumn, the SSJBM decided that its float in the Saint-Jean-Baptiste Day parade would pay tribute to the veterans. The society also invited the veterans to march with its members; it was the first time that non-members had played a significant role in the parade. The event was well attended, and veterans from other cities also wanted to march. In 1928, French, Belgian, and Italian veterans in Montreal joined the French-Canadian delegation. For the first time, Saint-Jean-Baptiste Day was representative of the multicultural nature of Montreal.

Artillery piece from the Second World War

In 1922, a gun captured during the First World War was installed in what is now Place du Canada, but it remained there for less than 20 years: in 1941, it was collected as part of a Second World War metal drive. In 1962, an artillery piece used in the Second World War was put in place near the cenotaph to commemorate the service of Montreal's gunners. At the time, it was thought better to leave it outdoors rather than put it in a museum. As the project leaders noted, "The gun now in the square brings a touch of real drama, to recall the service of Montrealers, and to do so not in tablet or monument, but with an authentic piece of history."[12]

Collection of the artillery piece from the First World War, 1942

© 1942, La Presse, No. 31975, *Le monde en images*, CCDMD

Artillery piece from the Second World War. Front view of the gun in its former location. Today, it stands next to the cenotaph.

Together, Dorchester Square and Place du Canada contain eight monuments, four of which commemorate Canada's military history. By chance, a statue of Sir John A. Macdonald, co–Prime Minister of the United Canadas (Canada West), stands in Place du Canada, and in Dorchester Square is that of Sir Wilfrid Laurier, the Canadian Prime Minister who sent troops to fight the Boers in 1903. As Opposition Leader in 1914, Laurier supported the war effort, but vehemently opposed conscription. Together, the two monuments represent more than 150 years of military history: from the wars of Empire to those of Canada, and the ideologies that shaped the Canada we know today.

Diane Joly *is a heritage consultant and historian (Les Fusiliers Mont-Royal, 1976–1978). In the course of her research, she sometimes comes across interesting facts from military history, which she collects for publication. The information in this article was gathered as part of a heritage assessment of public art she conducted in downtown Montreal in 2008, and from a Ph.D. thesis she defended in 2012.*

CMJ

NOTES

1. This history of the site and the monuments on it are based on two studies: Jonathan Cha, Étude historique des formes paysagères du square Dorchester et de la place du Canada, Service de la mise en valeur du territoire et du patrimoine, Ville de Montréal, 2008; and Diane Joly, Étude patrimoniale, art public, Square Dorchester et Place du Canada, Service de la mise en valeur du territoire et du patrimoine, Ville de Montréal, 2008.

2. Press clipping file, municipal archives. Dossier 3020, No. 13: "CANON, Le (monument)."

3. E. Andrew Collard, "The Russian guns," in *The Gazette*, 15 October 1983, p. B-2.

4. Roch Legault, "Les officiers de milice francophones (1760–1862): à l'œuvre et à l'épreuve," in *Cap-aux-Diamants: la revue d'histoire du Québec*, No. 43, 1995, pp. 28–31.

5. Carl Lochnan, "Victoria Cross," in *Historica Canada*, 7 June 2007 (last edited: 29 May 2015), electronic resource: http://thecanadianencyclopedia.ca, consulted in August 2016.

6. John MacFarlane and Ministère de la Défense nationale. "La longue marche de l'Afrique du Sud: en mémoire des Canadiens français qui ont participé à la première intervention militaire du Canada au XXᵉ siècle," in *Mens: revue d'histoire intellectuelle de l'Amérique française*, Vol. 7, No. 2, 2007, pp. 197–240. Summary in English at http://www.erudit.org/revue/mensaf/2007/v7/n2/1024124ar.pdf.

7. Alexander Reford, "Smith, Donald Alexander, 1st Baron Strathcona and Mount Royal," in *Dictionary of Canadian Biography online*, 1998, electronic resource: www.biographi.ca, consulted in August 2016; and "Lord Strathcona's Horse (Royal Canadians)," in *Canadian Army*, 23 June 2016, electronic resource: www.army-armee.forces.gc.ca, consulted in August 2016.

8. "Large crowds witnessed unveiling of the Strathcona and Soldier's Monument," in *The Montreal Daily Star*, 25 May 1907, p. 17.

9. "Governor-General Unveils Cenotaph to Glorious Dead," in *The Montreal Daily Star*, 11 November 1923, p. 1.

10. Dossier de la Ville de Montréal, *Cénotaphe*, preserved at the Direction du développement culturel.

11. This information is in the society's archives. Bibliothèque et archives nationales du Québec, Fonds Société Saint-Jean-Baptiste-de-Montréal (P82), centre de Montréal: https://archivesdemontreal.ica-atom.org/cenotaphe-1914-1918-au-carre-dominion-193. (The title of the fonds is in French only.)

12. "Gun Unveiled Here," in *The Gazette*, 15 October 1962, pp. 30-31, and https://news.google.com/newspapers?nid=Fr8DH2VBP9sC&dat=19621015&printsec=frontpage&hl=fr.

US soldiers stand next to a *Patriot* surface-to-air missile battery at an army base in Morag, Poland.

Poland's Choice for *Patriot*

by Debalina Ghoshal

As a part of its *Wisla* program, Poland has decided to finalize an agreement to buy a Raytheon-made *Patriot* air and missile defence system through a contract worth US $5.6 Billion. This deal has been completed under Poland's *Narew* program. Expanding and modernizing its missile defence system is a key element to the nation's military modernization process. During the initial planning stages, Poland had also given serious consideration with respect to the prospect of deploying the Medium Extended Range Air and Missile Defence System (MEADS). In 2014, the medium range air and missile defence program had nine bidders, namely, MBDA, Thales, Israel Aerospace Industries, MEADS, Rafael, Aselsan, Kongsberg, Diehl BGT Defense, and Poland's PGZ. However, later on, Poland decided to employ only systems with *operationally proven* defence capabilities, rather than those in the developmental phase, and thus, it rejected MEADS and chose instead the mature and proven *Patriot* system. Furthermore, over the years, Poland had scrutinized the systems that had bid for Poland's air and missile defence capabilities to check if those systems could provide a 360 degree coverage.

Polish Defence Minister Antoni Macierewicz

Polish and American soldiers look at a *Patriot* missile defense battery during a joint exercise at the military grounds in Sochaczew, Poland.

US and Romanian officials at the official ground breaking ceremony for the US *Aegis Ashore* missile defense facility at Deveselu, 28 October 2013

Russian President Vladimir Putin

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The new missile defence system in Poland will form a component of the European Phased Adaptive Approach, which is likely to become operational beginning in 2018. In May 2016, the United States operationalized the first $800 million *Aegis* Ashore Missile Defence System shield in Romania at the remote Deveselu air base. Poland has also agreed to host land-based components of the *Aegis* ballistic missile defence program that would use the *Aegis* BMD 5.1 combat system and SM-3 IB and IIA interceptors.

Russia's eastward expansion in Europe has not been viewed by Poland in a positive light. Poland is apprehensive of Russia's expansion, especially with respect to reports of Russia planning to field tactical nuclear missiles in Kalingrad, an exclave of Russia that borders Poland and the Baltic States - Latvia, Estonia, and Lithuania. Warsaw has characterized these moves as "disturbing" and "alarming." Poland's apprehension has a historic background. In September 1939, despite having signed a non-aggression pact with Poland in 1932, the Soviet Union invaded the country and persecuted countless numbers of its citizens. After the Second World War, Poland also lost some territory to the Soviet Union as it became a part of the Warsaw Pact, and it was only after the Cold War that Poland gained its independence. Since the Russia-Georgian conflict and the Ukrainian crisis, Poland's apprehensions have only intensified. Poland believes that Russia is attempting to regain "the power it lost after the break-up of the Soviet Union," aspirations that could deeply affect Moldova, Georgia, Poland, and the Baltic States (Lithuania, Latvia, and Estonia).

In 2015, Poland's new Government, the Law and Justice Party (PiS), hastened the process of the tender to acquire nine batteries that would provide Poland with a short range air defence capability. However, the *Patriot* deal eventually slowed down under the new government, despite Poland offering assurance of its intent to buy the system. The delay in the decision to purchase was due to the *Patriot's* high price and protracted delivery date, according to Defence Minister Antoni Macierewicz. The *Patriot* system is already being used in Europe by Germany, Greece, Italy, Spain, the United States, the Netherlands and Poland. The Netherlands, the United States, Germany and Spain have also fielded the *Patriot* system in Turkey, although *Patriot* deployment to Turkey was subsequently withdrawn by the United States, the Netherlands and Germany. Therefore, it was obvious that Poland would seek a defence capability that was interoperable with its NATO allies. At present, Poland probably will acquire the PAC-3 (MIM-104F) advanced defence version of the *Patriot,* since it already hosts training rotations of a battery of US *Patriots* with the PAC-2 (MIM-104C) capability. This prior experience with the older *Patriot* system means that it should be easier for Poland to assimilate and operate the advanced PAC-3 systems. Moreover, Raytheon has also agreed to co-develop the new system with Poland.

Russia has raised concerns with respect to the missile defence deployment by the United States and NATO in Europe, because they believe that the defence system negates their nuclear deterrent capability and creates strategic destabilization. In fact, in 2016, a Russian Presidential spokesperson stated: "Deployment of the ABM system poses a certain threat to the Russian Federation." However, NATO repeatedly has repeatedly assured Russia that the missile defence system is not aimed at Russia, but is being fielded in Europe to counter ballistic missile threats from Iran.

Iskander (NATO code name SS-26 *Stone*), a short range mobile missile system, is displayed during the Red Square Moscow Victory Parade of 2010.

Moscow also views its decision to station nuclear capable missiles in Kalingrad as its "right" to do so as a "logical response" to a missile defence threat from the United States. Nonetheless, in 1991, Russia had pledged to ensure that the Baltic States *are* and *remain* nuclear weapons free. Poland and the Baltic States are apprehensive of Russia breaking this pledge. Defence Minister Macierewicz fears that the deployment of *Iskander* missiles by Russia in Kalingrad can put Poland and Germany at threat, and therefore views a defence system as a credible deterrent against these threats.

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DND photo HS2002-10260-03 by Master Corporal Michel Durand

From left to right – HMCS *Algonquin*, HMCS *Protecteur* and HMCS *St-Johns* sail the Gulf of Oman in earlier times.

Maritime Futures Revisited

by Martin Shadwick

I t is no less true for being obvious that the past two years have been exceedingly difficult for the Royal Canadian Navy (RCN). Since the carefully nuanced announcement of 19 September 2014 that the infirmities of age, and such factors as the February 2014 fire that caused serious damage to the replenishment ship HMCS *Protecteur* would necessitate a reduction in the size of the fleet, the RCN has paid off both *Protecteur* and her sister ship, HMCS *Preserver*—together representing the entirety of Canada's naval replenishment capability—and two of the three surviving *Iroquois*-class area air defence/command and control destroyers, HMCS *Iroquois* and HMCS *Algonquin*. HMCS *Athabaskan*—the last of the original quartet of *Iroquois*-class destroyers—was added to the disposal list in 2016, with paying off to follow in early-2017. Also announced in 2016 was the decision, noticeably lower-profile but worrisome and capability-eroding in its own right, to divest the civilian-crewed CFAV *Quest*, the country's last naval oceanographic and acoustic research vessel. Internal documents released through Access to Information indicated that the *Victoria*-class submarines could begin paying off early in the next decade if not life extended and modernized, thereby raising new, if cyclical, questions about the future prospects of Canada's sub-surface capability. Add in seemingly-glacial progress on the new surface ship construction package put in hand by the previous Harper government, and one is presented with naval capability—and naval credibility—challenges of the first order.

That said, there has been demonstrable progress on a number of fronts. The pivotal *Halifax*-class Modernization (HCM)/ Frigate Life Extension (FELEX) project, with an industrial team anchored by Lockheed Martin Canada, Irving Shipbuilding and Seaspan, has proved most successful. Chantier Davie is moving forward on an aggressive timetable to convert a civilian container ship into an interim Auxiliary Oiler Replenishment (AOR) ship, while construction of the first *Harry DeWolf*-class Arctic and Offshore Patrol Vessel (AOPV) is well underway at Irving Shipbuilding. The cutting of steel for the second of the class, the future HMCS *Margaret Brooke*, commenced in late August of 2016. Confirmation that at least some of the *Kingston*-class Maritime Coastal Defence Vessels will be retained—presumably in a satisfactorily updated form—after the arrival of the five (perhaps six) Arctic and Offshore Patrol Vessels is also most welcome.

HMCS *Winnipeg* has already had its *Halifax*-class Modernization Frigate Life Extension (FELEX) Project completed.

A CH-148 *Cyclone* practices landing on HMCS Halifax, 27 January 2016.

the "procurement process so construction can start sooner and can deliver ships up to two years faster." The new approach "stems from a review of the Royal Canadian Navy's requirements that identified an opportunity to simplify procurement and design efforts, while maintaining all project objectives. The review, conducted over [the Summer and Fall of 2015], identified requirements that correspond more closely to existing warships. Rather than continuing with the previous approach, which consisted of selecting a Warship Designer and a Combat Systems Integrator to work together to custom design the [Canadian Surface Combatant], the newly endorsed approach allows Canada to select and modify an existing warship design through a single competitive process." Under the modified approach, as noted in the associated Technical Briefing, "we will use a single competition to select an existing warship design and, to a large extent, its original systems and equipment to be incorporated into the ship. This will reduce integration and schedule risks and bring greater cost certainty." By holding an open, competitive procurement process, "the government will ensure that the [RCN] gets the vessels it requires and obtains best value for Canadians, while maximizing innovation and efficiency." The "net effect is that the procurement can move forward to select an existing design as a point of departure. There will still be a requirement for some design changes in all of the existing warships; for example, to accommodate the [*Cyclone*] helicopter. Once selected, the design will then be subject to a controlled design change process to modify it to meet the final reconciled requirements of the Royal Canadian Navy." Actual construction of the Canadian Surface Combatants would remain the responsibility of Irving Shipbuilding.

Perhaps most importantly for the medium-to-long term future of the Royal Canadian Navy, the Trudeau government has moved to streamline and expedite the Canadian Surface Combatant (CSC)—the intended successor to the *Iroquois*-class destroyers and *Halifax*-class frigates, and by far the most fundamental and expensive capability component inherited from its predecessor, the National Shipbuilding Procurement Strategy (NSPS) —and to implement a series of broader governance-related enhancements to what is now labelled the National Shipbuilding Strategy (NSS).

The revised procurement strategy for the Canadian Surface Combatant, formally unveiled on 13 June 2016, seeks to simplify

Given an extraordinarily tight fiscal environment, and the rapid and disconcerting decline in the size of the Canadian fleet, there was, arguably, a certain inevitability to the decision to eschew the originally planned, custom-designed CSC in favour of a military-off-the-shelf (MOTS) solution. The decision, which breaks with the strategy that produced multiple custom-designed frigate and destroyer classes for Canada during the Cold War, may well serve to reduce integration and schedule risks, reduce costs, enhance cost certainty and expedite delivery of the Canadian Surface Combatant fleet. That said, MOTS—which comes in a variety of iterations—can be a 'two-edged sword.' Too little customization—or, perhaps, 'judicious Canadianization'—of an off-the-shelf design may produce a less than stellar match for

current and projected Canadian operational requirements and generate less than desired opportunities for Canadian industry. Conversely, too much customization may unduly increase costs, generate technical and program risk, and delay deliveries. Balancing this two-edged sword will demand Herculean efforts from all stakeholders.

Although two variants utilizing a common hull—one optimized for air defence and command and control, and one configured as a general-purpose CSC—are envisaged by the RCN, the CSC budget and the number of ships to be procured remain uncertain. As the ADM (Materiel), Rear-Admiral (Ret'd) Patrick Finn, noted in June 2016, "there is no need to decide on the exact number of ships today." The "ultimate number of ships will be a factor of the design selected, equipment capability, roles, etc. We certainly want to bring it as close to 15 as we can, but we also don't need to make that decision right now." The Harper government's Canada First Defence Strategy of 2008 envisaged 15 major surface combatants, but that number eroded in subsequent years. In 2015, for example, Jason Kenney, the final defence minister of the Harper era, spoke publicly about the possibility of only eleven such ships.

On the non-CSC front, one of the most painful and contentious elements of the naval rejuvenation process has been the extraordinarily long-running quest for replenishment vessels to replace *Protecteur* and *Preserver*. Originally pursued in the 1990s under the banner of the Afloat Logistics and Sealift Capability (ALSC) project, the Joint Support Ship (JSS) was initially envisaged as a hybrid suitable for underway support to naval forces at sea, in-theatre support of joint forces ashore, sealift, humanitarian operations, and sovereignty enforcement and surveillance. In short, much more than a standard Auxiliary Oiler Replenishment (AOR) vessel or even an enhanced AOR+. Three-or-four such Joint Support Ships were envisaged, but the effort fell victim to rising costs and continuing doubts, at least in some circles, over the design trade-offs inherent in such a vessel (although it is interesting that the Dutch persevered with the somewhat similar *Karel Doorman*). A second replacement competition—still, rather illogically, utilizing the Joint Support Ship designator—focused much more specifically on the replenishment role while including a reduced multi-purpose capability, eventually leading to the selection of a Canadianized, Seaspan-built variant of ThyssenKrupp Marine System's *Berlin*-class. Two Canadian-built ships—the *Queenston*-class—were envisaged (plus a notional third ship, if funding permitted), with deliveries initially slated for 2019 and 2020. This undertaking has generated no little angst and debate over cost, and, in the words of Michael Den Tandt, "the current amorphous delivery timeline for the two ships." Others have noted that the United Kingdom, Norway, Australia, and New Zealand have opted—for financial, speed of delivery or other reasons—to build their next-generation replenishment/support ships offshore.

To plug the gap left by the expedited disposal of *Protecteur* and *Preserver*, the Trudeau government opted in late-2015 to proceed with the conversion and leasing of a commercial container ship, the MV *Asterix*, as an interim Auxiliary Oiler Replenishment ship. Leased from Federal Fleet Services for five years (with an option for another five years) and converted by Federal's sister-company, Chantier Davie, the ex-*Asterix* will be operated by a civilian crew, but will include RCN personnel for communications

and replenishment-at-sea functions. Delivery of the vessel—arguably an AOR+, with Federal drawing particular attention to its Humanitarian Assistance and Disaster Relief (HA/DR) capabilities—is slated, impressively, for the autumn of 2017.

The *Asterix* exercise and the perceived defence priorities of the Trudeau government have effectively opened the floodgates to other conversion proposals. Irving Shipbuilding, for example, has proposed converting one-or-more commercial roll-on/roll-off vessels for the RCN, primarily for HA/DR, but with "secondary" replenishment and other duties (i.e., essentially the reverse of the *Asterix* model). Stephen Daly, writing for the *Canadian American Strategic Review*, has proposed a second *Asterix* conversion as an RCN Hospital Ship/Disaster Relief vessel. Serge Bertrand, a former advisor to several Commanders of the RCN, promotes "a purpose-converted peace support ship" in an intriguing essay prepared for the Canadian Global Affairs Institute (CGAI). "Recent operations by the RCN as well as allied navies," he contends, "have underscored a pressing need for the CAF to acquire a dedicated peace support ship, specifically to meet the unique demands of humanitarian assistance and disaster relief (HA/DR) operations. Such operations typically unfold in chaotic conditions, often in the *absence of*, or *hampered by*, extensively damaged…transportation networks and infrastructure. The characteristics that would permit such a ship to act as a seabase include: a substantial sealift capacity to embark personnel, vehicles, force logistics, and humanitarian materiel for transport into theatre; equipment to embark/disembark cargo, as well as transfer cargo at sea; deck space to accommodate or operate medium or heavy lift aircraft and landing craft to act as the ship/shore connectors to project, sustain, and support a force ashore, as well as to recover that force; and the internal space that can be dedicated to a joint headquarters, civil-military coordination centre, and medical and dental facilities, and accommodations for evacuees.

"Such a vessel," Bertrand continues, "would likely be among the most heavily utilized assets in the future CAF inventory. Capable of anticipatory pre-positioning or rapid deployment, a peace support ship would be an ideal platform for joint action across a range of relatively permissive scenarios. Such scenarios would include the evacuation of non-combatants from zones of incipient conflict, as well as support to forces ashore during a post-conflict recovery or stabilization period." Moreover, "such a vessel would likely emerge as the CAF's principal defence diplomacy asset, deployed routinely to regions of strategic interest to Canada with a range of personnel and joint capabilities embarked to strengthen regional capacities and strategic partnerships, or more broadly to conduct goodwill missions with other federal agencies and non-governmental organizations and assets embarked."

These are intriguing proposals, but several points should be stressed. For example, even if Canada ultimately acquires three AOR/AOR+ vessels—either the two *Queenston*-class, plus a purchased, post-lease ex-*Asterix* with full RCN crewing, or, less likely, three *Queenston*-class vessels—the troika could still not match the range of capabilities mooted by the ALSC project more than two decades ago. A support fleet confined to AOR/AOR+ vessels would mean reduced operational flexibility and a noticeably less-than-ideal match for the nascent defence policies of the Trudeau government. It would also leave the RCN out of step with trend lines in many allied navies. A supplementary

Artist rendering of *Resolve*-class AOR, a strategic enabler for Canadian Humanitarian and Disaster Relief capabilities

The most up-to-date rendering of the Arctic Offshore Patrol Vessel (AOPV)

conversion (or conversions) could help to address this gap, but one wonders if the heavy HADR focus of some proffered designs is prudent or cost-effective. Conversions offering some blend of underway replenishment, in-theatre support to forces ashore, sealift, HADR, and sovereignty enforcement and surveillance—be they in a national, United Nations, NATO, or coalition context— would appear to offer a more flexible way forward. Capabilities relevant to a broader range of military, quasi-military, and non-military roles would also enhance the case for full—rather than partial—RCN crewing of such vessels.

The Arctic and Offshore Patrol Vessel has weathered no little criticism since its inception relatively early in the Harper era. Less than helpful jibes about its claim to "slushbreaker" status appear to have diminished in recent times, although more instructive reservations about its endurance and sensor suite, and assorted capability "walk backs," continue to be voiced. It may prove possible to address some of these concerns through future upgrades. That said, AOPV offers the RCN an entirely new class of capabilities—as the Commander Maritime Forces Atlantic, Rear-Admiral John Newton, rightly noted in an interview with *Canadian Naval Review*—and significantly reinforces the most welcome return to the Arctic by Canada's navy. It will also be interesting to assess the utility of the AOPS in its far less frequently debated Atlantic and Pacific offshore surveillance and other roles. Whether a sixth AOPV—pledged by the Liberals during the 2015 election campaign—actually materializes remains to be seen.

On balance, the Trudeau government's performance to date on maritime affairs has been encouraging. Its 2015 campaign pledge to "fast track and expand the capital renewal of the Royal Canadian Navy," and "ensure that the [RCN] is able to operate as a blue water fleet well into the future," its efforts to strengthen the governance elements of the NSPS/NSS and its efforts to stream-line and expedite the Canadian Surface Combatant project hold promise. That said, no one should be under any illusions as to the magnitude of the challenges confronting the Trudeau government and myriad other stakeholders.

Finally, there is a need to stimulate and sustain an informed public, parliamentary, academic, and media discourse on maritime affairs and the future direction of the Royal Canadian Navy. The murky future of Canada's submarine service provides a particular case in point, but that issue, however vital, should constitute but one element of a broader discourse. Failure to generate such a discourse could mean reliving the sort of ill-informed free-for-all that has too often hampered meaningful discussion of defence procurement in Canada. Such a discourse could also provide the Royal Canadian Navy with an opportunity to explain and defend its current and future *raison d'etre* to a public that remains, for the most part, disconnected from the sea, maritime affairs and maritime peace and security. That is something to keep in mind for a navy that has sometimes had difficulty selling a life raft to a drowning man.

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Capturing Hill 70: Canada's Forgotten Battle of the First World War

by Douglas E. Delaney and Serge Marc Durflinger (Eds)

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NOTE: Other contributors include Tim Cook, Robert Engen, Robert T. Foley, Nikolas Gardner, J.L. Granatstein, Mark Humphries and Andrew Iarocci.

Reviewed by
John R. Grodzinski

Perched between the iconic victory at Vimy Ridge and the horror of Passchendaele, the capture of Hill 70, and the subsequent struggle to take the French industrial town of Lens, are hardly known to Canadians. In August 1917, the Canadian Corps achieved a costly, albeit victorious battle that was as innovative in execution as its earlier assault on Vimy Ridge. *Capturing Hill 70* restores Hill 70 to a rightful place among the great victories of the Canadian Corps. The nine essays presented in this volume, each written by a prominent Canadian historian, and each exploring different topics, achieve that goal. The originality of these studies and the quality of their scholarship places *Capturing Hill 70: Canada's Forgotten Battle of the First World War,* with the best historical titles to appear during the centenary of the Great War.

The struggles for Hill 70 and for Lens stemmed from the British success at Messines in June 1917 and the Third Battle of Ypres, the Flanders offensive that opened in the following month. Field Marshal Douglas Haig, the commander of the British Expeditionary Force, proposed a breakout from the Belgian coast that would initiate a German collapse. The British First Army, which included the Canadian Corps, was directed to prevent the enemy from reinforcing the defenders facing the main British offensive to the north, by taking Lens and threatening Lille. Lieutenant General Arthur Currie - whose knighthood was announced in the January 1918 Honours List - the recently appointed commander of the Canadian Corps, whose task was to take the city, disliked his army commander's plan for the Canadians to take Lens head on. Instead, Currie won approval for his proposal to take Hill 70, an important feature north of the city, that should make the German position in Lens untenable. It is this audacious opposition to his superior's orders that set the die for Currie's reputation as a bold, innovative commander, who personified Canada's growing independence in the Empire. Three weeks were then devoted in preparation for the offensive.
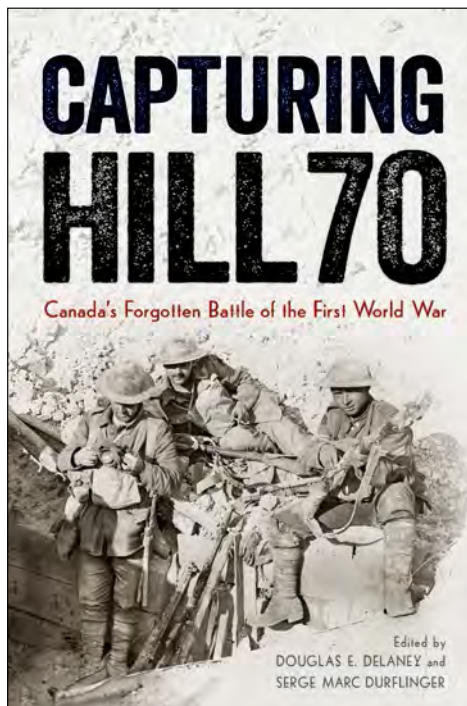
In a masterfully planned and well-executed attack that commenced on 15 August 1917, the Canadians speedily sliced through the defenders, and over the next three days, the corps lost nearly 1,900 men killed and wounded, as it withstood repeated German counterattacks. It was an exquisite tactical victory. Attention then turned to Lens. Instead of conforming to British and Canadian estimates that the Lens would have to be evacuated once Hill 70 was lost, the enemy stayed put, and turned the hastily prepared and haphazardly executed Canadian assault against a built-up area - terrain the Canadians had little experience with - into a costly failure. Unable to gain the final objective by the time the offensive was ended on 25 August, the corps' victory at Hill 70 became less complete than Vimy Ridge, and it soon faded into obscurity, as the Germans retained control of Lens until the following spring.

The essays in *Capturing Hill* 70 explore command (relations between the commanders of the First Army and the Canadian Corps, divisional commander, formation staffs and staff procedures; and assess Currie as corps commander), the employment of specific arms and services (chemical weapons, indirect fire weapons, transportation and supply, medical services), politics and manpower, and the heritage of the battle. The originality of the topics is evidenced in phrases, such as previous 'lack of attention that has been paid' (p. 31) to a particular subject, or the failure to give these two battles 'serious scrutiny' (p. 78) can be applied to every chapter. There is a lot of new material presented in these pages.

'The Best Laid Plans: Sir Arthur Currie's First Operations as Corps Commander,' by Mark Osborne Humphries, is an excellent examination of Arthur Currie's performance in this campaign. Nationalist historians and commentators present Currie's bold critique of his superior commander's plans, and the Canadian Corps Commanders' achievement in convincing General Sir Henry Horne, of the advantages that would follow by taking Hill 70 first, as indicators of the growing independence on the part of the Canadian Corps, and as evidence of some nascent Canadian 'way of war.' Others emphasize the growing professionalism of Currie, a simple colonial militia officer, who rose against the grain to corps-level command, against the stultified social elitism of the British officer corps. Humphries convincingly tempers this nationalist hubris. Currie did willingly 'voice his opinions to more senior officers,' and did 'articulate his point' (p. 98) in a masterful way, yet his inexperience resulted in an over-optimistic assessment that Lens would succumb without a fight, once Hill 70 was lost to the defenders. Currie revealed '…himself to be as vulnerable to the lure of a prestigious objective as many other Great War commanders' (p. 98), and supported a direct attack against the enemy's main defences:

the failed attack on Lens cost the Canadian Corps 1,154 casualties. Nonetheless, Currie exhibited qualities that once honed, would make him a fine corps commander.

Another Canadian 'victory' appears in a chapter by historian Andrew Iarocci entitled 'Sinews of War: Transportation and Supply.' The innovative use of narrow gauge railway to overcome shortages in motor transport, which allowed the Canadian Corps to move guns and shells, replenish units and evacuate casualties, invited complaints from Horne's First Army and Haig's General Headquarters. The construction and operation of light duty narrow gauge rail lines, so the staff reminded the Canadians, rested with General Headquarters. The Canadian Corps, they continued, was permitted to build their own rail lines so long as the rolling stock was pulled by horses, or pushed by men, a situation that made the transport of heavy shells difficult, and the movement of guns impossible. Currie's cogent response that rail schedules imposed by rear echelon timetables rather than tactical exigencies endangered the troops, won him approval to continue operating the lines using steam and coal locomotives, rather than with equine or human power. This important victory, somewhat less spectacular than the Canadian Corps commander's success in taking on an army commander, was one many encounters that reveal the growing skill of the Canadian commanders and staffs in the employment of the combat arms and services. Novel practices in logistical operations, mature command skills, good staff work and admirable fighting skills were hallmarks of the Canadian Corps in 1917, but to equate these qualities with the tools of nation building or independence exclusively distorts the reality of the period.

As revealed in *Capturing Hill 70*, the unique characteristics of the Canadian Corps - the permanent affiliation of its four divisions, the four battalion structure of the infantry brigades, and the extra artillery brigade at the corps level - did not diminish that fact that the Corps was an integral part of a larger Imperial army, the British Expeditionary Force. The Canadians and their Imperial brethren shared common staff procedures, training methods, equipment, weapons and dress, artillery staff procedures, and many of the same values. British officers also filled several command and many key staff positions throughout the corps. This is not to diminish the achievements of Canadian soldiers. Rather, it reinforces the fact that the young Dominion was a 'card-carrying' member of the British Empire, and that Canada was a willing participant in the Empire's struggle in the Great War. It may seem paradoxical that the supposed birth of Canadian independence resulting from the Great War came not from the ashes of Imperial sentiment. Hill 70 was one of many battles that stirred these ideas in Canadians.

As historian Doug Delaney notes in the introduction, Canadians are largely unaware of the events at Hill 70. The responses to an informal survey he conducted among 20 friends and family members to name battles from the First World War included the names of well-known battles: the Somme, Vimy Ridge, and Passchendaele. No one mentioned Hill 70. This book corrects the lack of attention historians have given to Hill 70, and brings the story to the reading public. *Capturing Hill 70* recovers 'some missing parts' (p. 26) of the historical record and give full justice to the tens of thousands of Canadians who fought at Hill 70. A related initiative, undertaken by the Hill 70 Monument Project (http://www.hill70.ca/) - which provided financial assistance towards the publication of *Capturing Hill 70* - will open a monument in 2017 to the memory of Canadian soldiers who fought and died at Hill 70.

Capturing Hill 70: Canada's Forgotten Battle of the First World War is a thought provoking book worthy of attention. By casting new light on this important battle and offering new perspectives on the leadership of Arthur Currie and the operations Canadian Corps, it makes an important contribution to our understanding of an important period of Canadian military history.

Major John R. Grodzinski, CD, Ph.D, *is an Associate Professor of History at the Royal Military College of Canada.*

Churchill and His Airmen: Relationships, Intrigue and Policy Making 1914-1945

by Vincent Orange

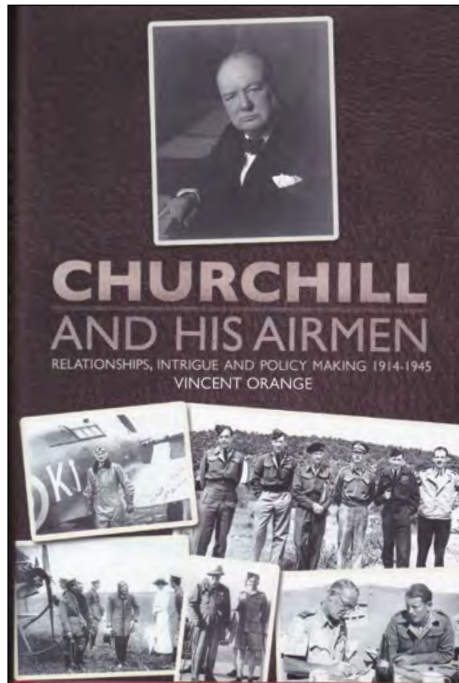### Reviewed by Randall Wakelam

In the first days of August 2016, both Canada's retiring and incoming Vice Chief of Defence Staff commented that there was too much interference from politicians in the conduct of military affairs.[1] Readers of *The Toronto Star* article might wonder how indeed government, both politicians and bureaucrats, interact with members of their armed services. How appropriate then to look at the experiences of the Royal Air Force, the world's first independent air service, through the lens of one of the last century's great political figures, Sir Winston Churchill.

Author Vincent Orange set out to do just that, covering Churchill's relationship with British air power, from the technical to the strategic. The association was a long one, extending beyond the period identified in the book's title, and many readers will be intrigued to learn that Churchill saw the potential of air power well before the opening volleys of the Great War, gaining some first-hand flying experience in 1909, while at the same time, foreseeing the potential threat to Britain. For those more familiar with air power than with high-level politics, an exposure to both Churchill and the complex and sometimes chaotic circumstances of Parliament and Cabinet can be enlightening. Churchill was first elected to the British House of Commons in 1900 and held a number of cabinet positions before becoming the First Lord of the Admiralty, in other words, the minister responsible for the Royal Navy, from 1911. In that post, he set about modernizing the Royal Navy, including pushing the development of aircraft, both dirigibles and aeroplanes. Churchill, ever the man of action, was a key proponent of the Dardanelles campaign in 1915, which led to the disasters at Gallipoli and saw him leave his seat in Parliament to spend several months commanding an army battalion on the Western Front. Returning to the Commons late in 1916, he was appointed Minister of Munitions, a thankless job as Britain scrambled through much of the war to produce sufficient munitions of reliable quality, not the least of these aircraft and aero engines.

As the war ended, Churchill was named Minister of War and also Secretary of State for Air, and it was his doing within Cabinet that secured the initial footing for the nascent Royal Air Force (RAF) to continue on in peacetime as an independent air arm. But supporter of the RAF or not, he was equally forced by national circumstances to sponsor what was called the 'Ten Year Rule,' which postulated that Britain would not be involved in a major conflict for the following decade, and thus, could keep defence spending to a minimum. Each year the geopolitical scene could be reassessed, and the ten year period restarted. It was not until the menace of Hitler was upon Europe in 1933 that defence spending witnessed growth. From 1924 to 1929, Churchill served as Chancellor of the Exchequer, in other words, the minister of finance, and here he fought hard to curb military spending. Out of favour with Conservative leadership during the whole of the 1930s, Churchill nonetheless kept himself informed with many defence developments, including those in air force and technological circles.

The Churchill most readers will know reasonably well was Prime Minister of the United Kingdom from 1940 to 1945. During that period, he led bravely, but not without dabbling in things he might better have left to his military leaders. We see this in Orange's discussion of the Battle of Britain, the Norwegian campaign of the same year, and his involvement in other longer campaigns, such as the Battle of the Atlantic, the Mediterranean and North West Europe campaigns, and the strategic bombing campaign. We also see that he was disinterested, for the most part, in events occurring in South East Asia.

During these decades Churchill had dealings with many of the top men in the British flying services, agreeing with some, disagreeing with others, and, as was the case in much of his political life, wanting to impose certain of his ideas, be they sound or not. This interaction between government and the air force, between leaders in both organizations, is what Professor Orange set out to describe in his volume, but unfortunately, he did not in many ways meet his goal. Before turning to the limitations of the book, it must be noted that the author passed away in 2012, and that Grub Street published his work the following year without the benefit of an intended final edit by the author.

What readers will find, as a result, is a work which, on the whole, flows chronologically chapter by chapter, but at the same time suffers from areas where there is confusion and duplication. There is also, it appears, a degree of rough cutting and pasting of ideas, as almost every chapter seems to lack a unified theme. The chapters are loaded with section headings that attempt to signal a change of topic, but discussion within sections often does not relate to the title. In the most frustrating cases, there are sections consisting of just one short paragraph. And almost never do the chapters have an introduction or a conclusion. The problem of theme, or thesis, starts from the first page, where Orange offers no thesis or purpose for the book, but simply begins the narrative of Churchill's dealings with aircraft, air power, and airmen. Only in

a very short conclusion do we get some sense that Orange wanted to address Churchill's strengths and weaknesses in relation to senior air commanders and air power policy.

Equally frustrating is Orange's apparent decision, according to the publisher's statement, "…that the text be published without footnotes, to make it more easily accessible to the general reader."[2] How lack of sources might achieve this is a bit of a mystery. Instead, the author makes passing mention of various writers, but not in a way that the general reader will know to whom he is referring, and he uses the occasional set of single quotes. This lack of 'fine-tuning' also plays out in other areas, where there are gaps in the index and where errors or omissions of fact appear. In one instance, Orange, born in Britain but living in New Zealand for decades, mentions the nations, including Australia and New Zealand, contributing flyers to Fighter Command in 1940 without any recognition of the part played by Canada.[3] In another place, Orange discusses the use of operational research in Bomber Command, mentioning Wakelam but not including the book by Wakelam in his bibliography.[4] In a third example, Orange discusses at some length Wing Commander Charles Anderson, whom, Orange states, was "…perhaps the most important of those RAF officers who communicated regularly with Churchill in the 1930s...." There is no listing of Anderson in the index, and we only get a thumbnail sketch of him and his service in the last paragraph of the section.[5]

While the book has serious limitations, Professor Orange set for himself an important task as his ultimate project. That he fell short of his goal through ill health and eventually death should in no way diminish our recognition of the potential of this volume.

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NOTES

1. See, for example, *The Toronto Star*, at https://www.thestar.com/news/canada/2016/08/05/lt-gen-guy-thibault-slams-level-of-bureaucratic-involvement-in-military.html, accessed 6 August 2016.
2. P. 6.
3. P. 145.
4. Wakelam, as it turns out, is the current reviewer, and the book, *The Science of Bombing*, is not identified. How then can the general reader explore this topic more should she/he be so inclined?
5. P. 102.

Torch: North Africa and the Allied Path to Victory

by Vincent P. O'Hara

Annapolis, MD: Naval Institute Press, 2015
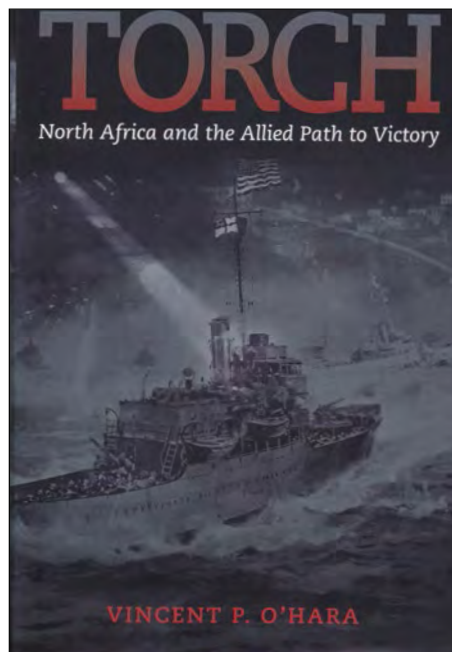
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Reviewed by Bernd Horn

When one reflects upon Allied operations in the Second World War, almost by default, one normally thinks of the D-Day invasion and the Normandy Campaign, the bitter slog up the Italian 'boot,' and the brutal clash of survival on the Eastern Front. Rarely, does Operation *Torch*, the first Allied combined offensive operation designed to seize French North Africa in November 1942, come to the fore. Yet, this operation represented at the time the largest amphibious assault in military history. Moreover, it was a complex operation that entailed five amphibious assault landings supported by simultaneous daring commando and airborne attacks executed across over three thousand kilometres of coastline. Furthermore, the operation's genesis and execution involved extensive civil-military interaction and coalition growing pains. Quite simply, it was a precursor to Allied success against the Axis powers.

This failure to fully recognize the importance, impact and value of Operation *Torch* is effusively addressed by the renowned naval researcher, Vincent O'Hara. He masterfully describes and explains the controversial and complex operation, placing it both within the context of the evolution of amphibious warfare, as well as its station within the larger war. Importantly, O'Hara integrates the French perspective into his narrative, providing excellent insight and understanding from all participants.

The book begins with an examination of the political / strategic discourse between the Allies, specifically, the British and Americans with regard to the political requirement to mount a large scale operation against Germany to assist the Soviets, who were under extreme pressure from the German offensive. The philosophical difference between the American preference for striking directly at Occupied Europe in France, and the more cautious periphery assault option of the British, created great tensions between the two camps. The author does an outstanding job in detailing the debate and eventual compromise. In addition, he adds valuable insight into the complexity of the French involvement in the political intrigue surrounding Operation *Torch*.

The author next moves on to the operation itself, and examines the five separate landings individually. O'Hara meticulously describes how the ships arrived, how the troops got ashore, and how they were supplied. Additionally, he describes in exacting detail the naval battles that accompanied the landings (complete with maps detailing individual vessel movements over time). However, he deals with the subsequent land battles in a more cursory manner.

In short, O'Hara tells the fascinating story of how the Allies evolved their system of coalition and amphibious operations and applied it to Operation *Torch*, which, in essence, was then applied and honed on subsequent operations. As such, it's the story of how the Allies won the Second World War in Europe.

The book's comprehensive narrative and detail are supported by outstanding graphic support. For instance, the volume includes 21 detailed maps that allow the reader to clearly follow the operation, as well as the naval battles that accompanied it. Moreover, there are 28 black-and-white photographs that provide a clear picture of personalities, terrain, and equipment. In addition, there are four tables that outline the order of battle of participants, a glossary of abbreviations, and a detailed list of ships sunk. Finally, the book possesses comprehensive endnotes, and an excellent select bibliography for further study.

In sum, the book is simply impressive. Well written and researched, the volume is an excellent source book/reference for Operation *Torch*. O'Hara once again substantiates his reputation as a leading scholar of the Mediterranean theatre of the Second World War. I strongly recommend the book for anyone who is interested in that particular war, military history, coalition operations, as well as civil military affairs and strategic planning.

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