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INTELLIGENCE FOR THE CANADIAN ARMY

IN THE 21ST CENTURY

"ENABLING LAND OPERATIONS"

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ABSTRACT

While the Canadian Army has almost a century of intelligence experience, the truism that "how we define what we think we are doing when we are doing intelligence shapes how we do intelligence" is affecting the type of intelligence available to the Canadian Army today. Starting from a British model of intelligence as a specific form of information, Canada moved to an American model of information as a specific component of Intelligence. However the promise of information technology and the pursuit of the RMA led the Canadian Army off in another direction in the mid 1990s to subordinate intelligence to Information Operations (IO) and Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) in its doctrinal thinking. As a result, an information management approach to intelligence has dominated. In turn, the knowledge aspect of intelligence, specifically in the areas of basic intelligence and the development of theatre expertise in intelligence analysts, has been neglected.

The post-Cold War experiences of the Canadian Army have led to a series of developments in the employment of intelligence to support Land Operations, and are only now starting to positively influence the intelligence structure within the Army after over 15 years of operations. However the lack of a solid conceptual foundation has caused the Army to organize in keeping with its information management outlook, neglecting to lay the foundation for the knowledge oriented intelligence system that the Army requires to operate in the complex operations that it envisions for the future. By focusing on an intelligence doctrine specifically linked to force employment, the Army has suffered in the areas of force generation and theatre preparation prior to a deployment.

To orient itself for the 21st Century, Army Intelligence needs to be re-oriented away from this information management construct and towards a knowledge management one, emphasizing integration within a Joint, Interagency, Multinational and Public (JIMP) framework to operate at both the operational and tactical levels, supported by the basic, current and estimative intelligence required to support not only force employment, but also force generation and theatre preparation.

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INTRODUCTION

"*The primary duty of Intelligence is to give the Commander whatever information he requires about the enemy and to bring any significant changes to his notice immediately.*"

1st Canadian Army Final Intelligence Report, 1945[1]

The first years of the 21st century have seen the Canadian Army deploy into missions and areas remarkably different from both the Cold War, and the decade that followed it. By the beginning of this century the Army found itself in a counter-insurgency against a determined, adaptive, asymmetric adversary very unlike the one it had prepared to meet. Occurring concurrently was a revolution in the field of information technologies that had an increasing impact on how military operations were both conceived and conducted. Until just recently however, little changed in how the Army structured its intelligence organizations.

The Canadian Army has employed intelligence successfully in war, and neglected it in peace, for almost a century. Prior to World War One, the Canadian Army had no intelligence architecture and developed one as it was fielding its first divisions.[2] It adopted a uniquely Canadian architecture which departed from the normal staffing of a British Staff within an Imperial Division by adding specialized intelligence officers at both the divisional and brigade levels. This innovation was followed a year later by the establishment of intelligence officers in each battalion. Canada also instituted new

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[1]   Canada, First Canadian Army, 42-1-0/Int - *First Canadian Army Final Intelligence Report* (July 1945), 8.

[2]   An intelligence architecture refers to the organization, the communications or information technology and the processes used to produce intelligence.

intelligence practises and the First Canadian Division daily intelligence summary was the first published by any of the ten divisions of the British Army in France.[3]

The lessons and structure of the Great War did not survive the peace, and the Canadian Army of World War Two had a similar learning experience.[4] Again an expanded Canadian intelligence structure was implemented, with the additional creation of a dedicated Canadian Intelligence Corps in 1942 to provide trained intelligence personnel to army, corps, divisional and brigade staffs.[5] Once more the Canadian Intelligence organization evolved in response to combat, and in 1945 devolved in response to peace. Although the Canadian Intelligence Corps tottered along for two decades after the war, it was unable to survive the rigours of unification and was merged with the Military Police to form a tri-service Security Branch in 1968.[6]

Just before the end of the Cold War, the 1980s saw the next wave of ebb and flow for intelligence within the Army. The Intelligence Branch came about in 1982, divorcing from the Security Branch.[7] At the same time the combat development system of the

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[3]   The First Canadian Division began publishing a daily summary in arch 1915. Major J.E. Hahn, *The Intelligence Service within the Canadian Corps,1914-1918*

Army published Corps '86 which drew upon American post-Vietnam intelligence re-organization for combat in Europe to create brigade, division and corps intelligence units.[8] As part of Army 2002, an army intelligence architecture was developed for both Europe and Canada based on a comprehensive regular and reserve intelligence architecture to respond to what was seen as a growing Soviet threat.[9] However, the end of the Cold War, resulted in a loss of momentum and the intelligence function within the Army stalled once again. This time the fall was not as great as at the end of the two world wars, both because of the fact that the majority of the Army 2002 initiatives had not yet been implemented, and the peace support operations of the 1990s began to provide an alternative rationale for retaining some level of Army Intelligence capability.

The recent war in Afghanistan has once more re-energized the Canadian Army's interest in intelligence and initiatives are underway to provide a more robust intelligence architecture within the Army. This time however land warfare is not the sole purview of the Army. While a key player, the Canadian land warfare arena is becoming a much more crowded one with both conventional and unconventional military forces operating alongside other governmental and non-governmental civilian organizations.

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[8]   Corps '86 was a doctrinal development model used by the Canadian Forces to represent what a Canadian Land Force should like within the context of a Canadian Corps. It was not restricted by funding, but rather was based upon the capabilities thought to be required for a war in central Europe against the Soviets. It eventually resulted in a series of doctrinal publications written in the late 1980s and early 1990s as well as forming a core part of the CF Land Command and Staff Course (CFLCSC) in Kingston. Its successor, Corps '96 was following the same path when it was stricken by the end of the Cold War and a realization that the post Cold War budgets would not require Canadians to think at the Corps level. Department of National Defence, *Introduction to the Corps '86 Concept* (Ottawa: DND Canada, 1986) and Department of National Defence, *System Study 1996-2005: Synopsis* (Ottawa: DND Canada, 1991).

[9]   Army 2002 was an overall Army strategy to field forces for both Europe and Canada in response to the Conservative government's 1987 White Paper. It was based on a Division for Europe and a division

This paper will argue that the Canadian Army needs to both reframe its concept of Intelligence to concentrate on the knowledge aspects of the discipline, and reorganize accordingly to effectively support Canadian land operations in the 21st century. To do so it will examine the broad concepts of intelligence in a land warfare context to understand how they may be implemented in light of Canada's emerging operational and intelligence experience with an eye to the future. It is divided into three parts with the first chapter setting the stage and laying the groundwork for understanding what is meant by intelligence. It will examine the definition for intelligence and proceed to examine both the issues that arise from that definition and concepts such as Information Operations (IO) and Intelligence, Surveillance, Target and Reconnaissance (ISTAR) that arose since the end of the Cold War which draw upon or influence how this definition is viewed. In second chapter, Canada's Operational and Intelligence experience since the end of the Cold War up until the present will be examined to understand any shortfalls. Chapter three will conclude by looking at how this operational experience is likely to evolve in the future and by proposing intelligence concepts that will shape the Canadian Army's intelligence architecture.

CANADIAN INTELLIGENCE CONCEPTS

"Almost everyone in Canadian Intelligence started at his job from scratch. In the mixed process of learning and doing we came to rely on general propositions."

1st Canadian Army Final Intelligence Report, 1945[10]

Introduction

Before proceeding further it would be useful to understand some of the key concepts underlying the intelligence discipline. This chapter will start by looking at intelligence as a stand alone discipline, examining its definition and the implications arising from it. In response to the Revolution in Military Affairs (RMA) debate in the mid 1990s a variety of new conceptual constructs emerged in Canadian Doctrine, both at the Army and Joint levels, based upon a desire to leverage emerging sensor and information technologies. These have included such constructs as Information Operations (IO), Relevant Information (RI), Information and Intelligence (I2), Intelligence Surveillance Target Acquisition and Reconnaissance (ISTAR) and Intelligence Surveillance and Reconnaissance (ISR). While they have generally not rejected the accepted definition of intelligence, they have affected how it is understood and as such will also be considered. Finally this chapter will look at how the Canadian Army has organized conceptually itself to do intelligence.

What is Intelligence?

What do we mean by intelligence? More to the point, what does Canada mean by Intelligence? In his essay on divergent national intelligence concepts and institutions, Philip Davies proposed, "how we define what it is we think we are doing when we are

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[10] *First Canadian Army Final Intelligence Report*, 5.

doing intelligence shapes how we do intelligence."[11] As the concept is not a naturally occurring one, its boundaries are very much set by the definition chosen. Canada currently uses the NATO definition, which is reflected in the Canadian Forces Defence Terminology Bank (DTB) and states that intelligence is:

> The product resulting from the processing of information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product and to the organizations engaged in such an activity.[12]

The roots of this definition are not new, and the American intelligence practitioner and academic Sherman Kent encapsulated the main points over half a century ago. His book structures its chapters to consider intelligence as a kind of knowledge, an organization that produces knowledge, and as an activity pursued by an intelligence organization.[13] This was based on what he considered to be the three "separate and distinct things" usually meant when the word intelligence was used. He used examples from common usage, presented as:

> "What intelligence have you turned up on the situation in Columbia?"
> "Intelligence was able to give the operating people exactly what they wanted."
> "The intelligence [work] behind that planning must have been intense."[14]

The current American definition is similar to the NATO one; however it expands "the processing of information" to "the collection, processing, integration, evaluation,

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[11]   Philip H.J. Davies, "Ideas of Intelligence: Divergent National Concepts and Institutions." *Harvard International Review*. Vol. 24 No.3 (Fall 2002), 66.

[12]   Defence Terminology Bank (DTB), DWAN http://terminology.mil.ca accessed 22 Feb 2008.

[13]   Sherman Kent, *Strategic Intelligence for American World Policy* (Princeton, NJ: Princeton University Press, 1949), ix.

[14]   *Ibid.*, ix.

analysis, and interpretation of available information".[15] Of note, the Canadian pre-

integration definition of intelligence from 1965 had a similar, although not the exact

same, expansion beyond merely processing.[16] In all cases, it appears that in NATO,

Canadian and United States usage the term intelligence refers to a product, a process and

an organization.

This meaning is understood by current Canadian Army intelligence practitioners.

In a recent article for the *Canadian Army Journal* the Army's senior intelligence officer,

Lieutenant-Colonel Villeneuve, referenced the NATO definition, contrasting it to a

civilian author's definition to conclude that intelligence could "be summarized as an

organization, product and a process".[17]

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[15]   The 2007 Joint Intelligence manual introduces the following definition, noting that the Joint Doctrine Terminology publication will be updated with it "Intelligence. The product resulting from the collection, processing, integration, evaluation, analysis and interpretation of available information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product and to the organizations engaged in such activity." United States, Chairman of the Joint Chiefs of Staff, JP 2-0 *Joint Intelligence* (Washington DC: US Government Printing Office, 22 June 2007), GL-11.

The previous definition in used by the US Army's 2004 FM 2-0 Intelligence manual had used the previous joint definition citing "1. (joint) The product resulting from the collection, processing, integration, analysis, evaluation and interpretation of available information concerning foreign countries or areas. 2. Information and knowledge about an adversary obtained through observation, investigation, analysis or understanding." United States, Department of the Army, FM 2-0 *Intelligence* (Washington DC: US Government Printing Office, 17 May 2004), Glossary-8.

[16]   "Intelligence – the product resulting from the collection, evaluation, analysis, integration, and interpretation of all available information which concerns one or more aspects of foreign nations or of areas of operations and which is immediately or potentially significant to military planning and operations." Department of National Defence, CFP 125 *Canadian Forces Glossary of Military Terms and Definitions* (Ottawa: DND Canada, 1965),unpaged.

[17]   The civilian definition used was "the systematic, planned and objective-based (non random) collection, analysis and dissemination of information based on open or denied sources." Lloyd Hoffman, "Intelligence, Military" *Brassey's Encyclopedia of the Land Forces and Warfare* (Printed in the United States of America, 1996) 509 quoted in Lieutnant-Colonel Daniel Villeneuve, "A Study of the Changing Face of Canada's Army Intelligence" *Canadian Army Journal* 9.2 (Summer 2006), 19-20.

Intelligence as a Product – A Question of Knowledge

Inherent in the NATO definition of intelligence is the concept that information

comes before it, and through processing becomes intelligence. This has not always been

the understanding, and it is a construct that has evolved over time. Prior to World War

One, intelligence was portrayed merely a specific set of information.[18] During that War

little processing occurred at battalion or brigade level, instead merely the recording and

forwarding information upwards. However, at the divisional level intelligence staffs

would issue an "intelligence appreciation" every ten days or so reflecting an assessment

of the overall enemy dispositions and intent.[19] The more fluid situations of World War

Two reinforced this greater tendency towards the synthesis of information at the

divisional and corps level.[20]

Canadian Army doctrine after the war reinforced this concept of intelligence as a

specialized form of information. In the 1960s infantry battalion commanders had no

requirement for intelligence, only "accurate and timely information."[21] At the brigade

level commanders relied upon their intelligence staffs for information, with intelligence

concerned with information on the enemy.[22] One of the more confusing considerations

of information, intelligence was the view that: "Information is knowledge about the

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[18]   United Kingdom, War Office, No. 7606/1344, *Regulations for Intelligence Duties in the Field* (London: Eyre and Spottiswoode, 1904), 5.

[19]   Hahn, The Intelligence Service…, 185-198.

[20]   Elliot, *Scarlet to Green*, 179-218 and 252-313.

[21]   Department of National Defence, CAMT 7-84, The *Infantry Battalion in Battle (Motorized)* (Ottawa: Canadian Forces Headquarters, 1960), 6.

[22]   Department of National Defence, CAMT 1-8*, The Infantry Brigade Group in Battle - Tactics* (Ottawa: Canadian Forces Headquarters, 1960), 46-48.

enemy and topography and only becomes intelligence at a stage within the intelligence process when facts are compared and deductions have been drawn."[23]

Shortly after this a change began to occur through the late 60s and into the 1980s as the word knowledge began to appear more and more often. The notion of combat intelligence was introduced as "that knowledge of the enemy, weather and geographical features…"[24] Later thinking from the 1980s stated that "intelligence in the military context is the sum of our knowledge and understanding of the situation."[25]

While hard to trace, this Canadian change in perception in how intelligence is defined in relation to information and knowledge may owe less to any post war development of Canadian understanding on the nature of intelligence than it does to a growing American, and waning British, influence on Canadian intelligence as a whole. Davies has noted that the differing origins of the American and British intelligence apparatuses shaped their basic conceptions of the boundaries of intelligence. He proposes that while the views of both countries were closely aligned prior to World War Two, the events of Pearl Harbour pushed the Americans in a new direction. Before that, intelligence was regarded as a specific type of information, the secret and hard to get kind. The fact that the "intelligence failure" at Pearl Harbour was not due to a lack of this "raw intelligence" lead to an American emphasis on the proper coordination and analysis of this "raw intelligence" in order to get a finished intelligence product more

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[23]   Department of National Defence, CAMT 1-36, *Staff Procedures, Volume 3, Staff Duties in the Field* (Ottawa: Canadian Forces Headquarters, 1963), 323.

[24]   Department of National Defence, CFP 315(2) *Security and Intelligence in the Field, Volume 2 – Intelligence in the Field* (Ottawa: DND Canada, 1973), 1-2. Department of National Defence, CFP 125 *Canadian Forces Glossary of Military Terms and Definitions* (Ottawa: DND Canada, 1965), unpaged.

[25]   Department of National Defence, B-GL-315-002/FT-001 *Combat Intelligence*, First Draft. (Ottawa: DND Canada, 1988), 1-2.

suited to supporting American decision makers. The result of this was that the two concepts of intelligence began to diverge. The first was a British concept, where intelligence was still regarded as a specific type of information, and the second an American one where information was now regarded as a specific component of intelligence.[26]

Thus when Sherman Kent was writing in 1949, he expressed a less ambiguous perception about intelligence. The first part of his book, *Strategic Intelligence for American World Policy*, was titled "Intelligence is knowledge", the first chapter was titled "Intelligence is knowledge", and the first sentence in that chapter was "Intelligence means knowledge."[27] Fifty years later, in his book *Knowledge Management in the Intelligence Enterprise* Ed Waltz proposed a more nuanced approach where data, information and knowledge were merely levels of abstraction and that all of them could be referred to as intelligence at various stages of its development from unfinished reporting, or "raw intelligence" through to a finished intelligence product.[28]

There has always been a bit of tension in typifying intelligence as either a type of specialized knowledge or a type of specialized information when seen from the consumer's perspective. Sherman Kent recognized this when he commented on the problem posed by an intelligence process that excluded the consumer from its inner workings. He likened it to a commander being told "Now don't you worry, your thinking is being done for you. We've arranged to relieve you of all thinking by giving you an

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[26]   Davies, "Ideas of Intelligence…", 64-65.

[27]   Kent, *Strategic Intelligence…*, 1-3.

[28]   Ed`Waltz*, Knowledge Management in the Intelligence Enterprise* (Boston:Arctech House Inc., 2003), 3.

external brain. We call it intelligence."[29] Perhaps recognizing both this and the skills of

Canadian commanders, the Senior Canadian intelligence officer in the First Canadian

Army during World War Two thought that the main role of intelligence was to be able to

report what the enemy was doing first, through a synthesis of information, and only then

furnish an estimate of his future, as many commanders are better placed by their

development and education to do so.[30] He envisioned a partnership in developing the

knowledge subset, vice an intelligence monopoly.

Half a century after Pearl Harbour another challenge to this construct of

"intelligence as knowledge" arose. In the middle of the 1990s, within the larger

discussion of a Revolution in Military Affairs (RMA), the United States military began to

search for a means to re-conceptualize information in the wake of the increasing

importance of information technology both inside of the military and within business and

politics. This led to the introduction of the cognitive or information hierarchy in

American military doctrine starting in the Navy and Marines and moving into the Army.

The hierarchy envisioned a construct, normally portrayed as pyramidal, where data

moved through various stages, first becoming information, then knowledge before

moving onto becoming understanding. This construct was borrowed from business

academia of the 1980s.[31] Its originator, Harlan Cleveland, attributes lines from T.S.

Elliot's poem "The Rock" as the genesis for his construct, citing the lines "Where is the

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[29]   Kent, *Strategic Intelligence…*, 189.

[30]   *First Canadian Army Final Intelligence Report*, 3

[31]   The development of the cognitive hierarchy from a poem by T.S. Elliot, through business literature into use first by the US Navy and Marine Corps before entering the US Army can be found at – Major K. Dowell and Major H. Weigand, "Situational Awareness within a Battle Group" (paper for Land Force Technical Staff Programme, Royal Military College Kingston, June 2002), 2-7 to 2-9.

wisdom we have lost in the knowledge? Where is the knowledge we have lost in the information?"[32]

The Canadian Army leaned heavily on this concept to conceptualize its thinking on situational awareness (SA) and to promote the concept of a Common Operating Picture (COP). This led to a COP that was portrayed as an amalgamation of "colours of SA", one of which was Red, referring to the adversary, and another Brown, referring to the environment. Unfortunately at times this led to certain looseness of expression, with statements that asserted both that that Red SA "provides information on the enemy location, disposition, status and intention" and that "Red SA is the knowledge of the enemy".[33] Generally, the term intelligence as a product became synonymous with those of Brown and Red SA in Army usage.

Not only did intelligence's relationship to knowledge became somewhat murky under this construct, it became somewhat constrained as well. Two interesting observations were made in the same time period that the RMA was being discussed. The first was put forwards by David Kahn in 1994 when he observed that there were essentially two kinds of intelligence, differentiated by source and not method of collection. The first kind was derived from traditional reconnaissance and was oriented on the physical aspects of the target or source. It was focused on things. The second kind was derived from targets in the verbal realm. Kahn described this as information from a human source, a stolen plan, an overhead conversation of a radio intercept. He

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[32] Cleveland, H., *The Knowledge Executive: Leadership in an Information Society* (New York: Truman Talley Books, 1989), 22.

[33] Department of National Defence, B-GL-352-001/FP-001 *Intelligence, Surveillance, Target Acquisition and Reconnaissance* (Ottawa: DND Canada, 2001), 19-21.

saw that *physical* intelligence targeted the physical aspect of the enemy by focusing on

capabilities, while *verbal* intelligence targeted the psychological aspect of the enemy,

focusing on intent.[34]

Four years later, Michael Herman built upon this construct when he pondered the

relationship of traditional intelligence thinking with the RMA. He proposed a duality of

intelligence that revolved around *observation-measurement* intelligence and *textual*

intelligence. The first leant itself reasonably easily to the RMA discussion, and concepts

like SA and COP where the physical aspects of the enemy could be quickly displayed and

understood. The second however did not. Like Kahn's *verbal* intelligence, *textual*

intelligence dealt with issues of the mind like intent, attitudes and thoughts. Herman

viewed *textual* intelligence as providing that necessary third dimension to SA. It could

not be displayed within a COP. It was this exclusion that bothered Herman, and he

cautioned against the rush to embrace such a concept as providing knowledge vice

merely useful information.[35]

A more detailed discussion on the issues arising from the Canadian Army's

reaction to the RMA will follow later. For now this paper will continue to explore the

issue of knowledge and intelligence. To have value in continuing down this line however

there has to be a substantive difference in application as to whether or not intelligence is

merely information on the enemy or knowledge about the enemy. Given the

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[34]   David Kahn, "Toward a Theory of Intelligence", *MHQ: Military History Quarterly*, Vol.7 No.2 (Winter 1994), 93-95.

[35]   Herman first considered these two types to be *observational* and *message-like* in his book *Intelligence Power in Peace and War* but later modified his terminology. Micheal Herman, *Intelligence Power in Peace and War* (Cambridge: Cambridge University Press, 1996), 82-84. See also Michael Herman, "Where Hath Our Intelligence Been? The Revolution in Military Affairs," *RUSI Journal* 143, No. 6 (Dec 1998), 65-67.

development of the two complementary disciplines of information management (IM) [36]

and knowledge management (KM)[37] it is suggested that there is value in this

differentiation. The key difference between the two disciplines is the recognition of

importance of the individual as well as the representation of the knowledge in KM, while

IM tends to treat information as equivalent to a physical entity, to be created, stored and

disposed of. If intelligence is a type of information, then emphasis in the process will

become oriented on designing a system based on the IM paradigm. If intelligence is

considered as a type of knowledge, then the role of the individual becomes important and

needs to be explored further in concert with the way the physical representation of the

knowledge is handled. Sherman Kent recognized this human component, and stressed

that all of his discussions on the nature of intelligence are based upon:

> the intellectually competent human – the person who was born with the makings
> of a critical sense and who has developed them to their full potential; who through
> first hand experience and study has accumulated an orderly store of knowledge;
> and who has a feeling for going about the search for further enlightenment in a
> systematic way.[38]

Ed Waltz, in his application of KM practises to the intelligence enterprise, saw

KM as dealing with people, processes and technologies.[39] In keeping with KM practises

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[36]   Information Management is "The discipline that directs and supports effective and efficient management of information as a strategic resource of value to the DND/CF in order to ensure that the value of the information is identified and fully exploited. Note: IM includes the planning, coordination and control of the creation and acquisition, use of, analysis, processing, integration, distribution, safeguarding, retention and disposal of information."   DTB. DWAN http://terminology.mil.ca accessed 24 Feb 2008.

[37]   Knowledge Management is "An integrated systematic approach which when applied to an organization enables the optimal use of timely, accurate and relevant information; it also facilitates knowledge discovery and innovation, fosters the development of a learning organization and enhances understanding by integrating all sources of information, as well as individual and collective knowledge and experience." DTB. DWAN http://terminology.mil.ca accessed 24 Feb 2008.

[38] Kent, *Strategic Intelligence…*, xxi.

[39] Waltz, Knowledge Management…, 56.

he views knowledge as an object, and that there are two basic distinctions in how

knowledge is categorized as an object.[40] The first is as *explicit* knowledge. This is

knowledge that has been captured and codified, is tangible and external to a person, and

can be stored, repeated and taught. The second is implicit knowledge. This is knowledge

that is:

> the intangible, internal, experiential, and intuitive knowledge that is
> undocumented and maintained in the human mind. It is personal knowledge
> contained in the human experience.[41]

While both Kent and Waltz, more than fifty years apart, recognized and expressed

the value of the individual as part of intelligence product this recognition has not passed

into Canadian doctrine. Instead Canadian doctrine developed very much along the lines

of the IM model. In contrast, the latest US Army keystone manual, FM 3-0 Operations,

discusses both KM and IM, albeit with a distinct bias towards *explicit* knowledge.[42] It

has however acknowledged the importance of *tacit* knowledge, although not referring to

it as such, by recognizing area expertise as an essential building block for the intelligence

professional. An example of this is Project Foundry, where deploying American Army

intelligence analysts work with national collectors for up to a year prior to deployment to

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[40]   Waltz, *Knowledge Management…,* 63.

[41]   *Ibid.*, 63.

[42]   United States, Headquarters of the Army, FM 3-0 *Operations* (Washington DC: U.S. Government
Printing Office, 27 February 2008), 7-10 to 7-13.

develop a specific area expertise.[43] Similarly, the US Marine Corps also has the concept

of an area expert in their intelligence doctrine.[44]

In regards to the *explicit* knowledge side of Intelligence, its existence as a product

can be considered in terms of levels and types. Canadian Joint Intelligence doctrine sees

these levels as strategic, operational and tactical and defines them by the needs of

decision makers at those levels, not by the level of the producer or collector.[45]   While the

introduction of the operational level is new, previous Canadian thinking had

differentiated between the differing levels of strategic and tactical, or combat

intelligence.[46] Recently the Canadian Army dismissed these levels of intelligence as a

thing of the past, clearly rankling at the idea that one could "apply value judgements as to

which was more important" given the information technology of the day.[47] This attitude

does not appear to do justice to the requirements of the user over the importance of the

producer and given the Army's rediscovery of the operational level of war and the utility

and need for the campaign plan, this attitude may bear re-examination.[48] Of note, both

US Joint and Army doctrine recognize the three levels of intelligence, but the US Joint

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[43]   Institute of Land Warfare, Association of the United States Army. *Key Issues Relevant to Army Intelligence Transformation - Torchbearer National Security Report* (July 2007), 11 available from http://www.ausa.org/webpub/DeptILW.nsf/byid/KCAT-6CXKU9; Internet accessed 19 April 2008.

[44]   United States, Department of the Navy, MCDP 2 – *Intelligence* (Washington DC: US Government Printing Office, 7 June 1997), 96.

[45]   Department of National Defence, B-GJ-005-200/FP-000 *Joint Intelligence Doctrine* (Ottawa: DND, 21 21 May 2003)*,* 2-1.

[46]   The terms can be found at Department of National Defence, CFP 125 *Canadian Forces Glossary of Military Terms and Definitions* (Ottawa: DND Canada, 1965), unpaged.

[47]   Department of National Defence, B-GL-357-001/FP-001, *Field Manual - Intelligence* (Ottawa: DND, 2001), 3.

[48]   Department of National Defence, B-GL-300-001/FP-000, *Land Operations* (Ottawa: DND, Draft 2007)*,* 3-2 to 3-4.

doctrine further divides the strategic level into National Strategic Intelligence and Theatre Strategic Intelligence.[49]

The types of intelligence were referred to by Sherman Kent as classes of intelligence, and he offered the view that there were three at the strategic level. He presented them as "the basic descriptive element" or basic intelligence, the "current reportorial element" or current intelligence, and the "speculative-evaluative element" or estimative. He made specific mention as to a proliferation of terms surrounding types of intelligence as his reason for his reframing of concept.

In Canada Kent's classes of intelligence become types, but confusion remains as to their nature. The Army recognizes only two types, basic and current intelligence.[50] NATO adds a third, target intelligence.[51] The Canadian *Joint Intelligence* manual brings the total to five with the introduction of estimative and warning intelligence.[52] Interestingly, the Australians recognize only four, rejecting target intelligence.[53] The definitions of these types can be found in Table 1 below.[54]

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[49]   US, JP 2-0 *Joint Intelligence,* I-21 to 22.

[50]   DND, *Field Manual - Intelligence*, 6.

[51]   North Atlantic Treaty Organization, AJP 2.0 *Allied Joint Intelligence, Counterintelligence and Security Doctrine* (Brussels: NATO, 2003), 1-2-3.

[52]   DND, *Joint Intelligence Doctrine*, 2-1 to 2-2.

[53]   Australia holds target intelligence to be an intelligence discipline as opposed to a type or class of Intelligence, making the distinction between two. Australia, ADDP 2.0 *Intelligence and Security Series – Intelligence*, September 2006, 1-6.

[54]   All definitions are drawn from the CF *Joint Intelligence Doctrine*, the first three are attributed to the NATO definitions the last two, estimative and warning are not. DND, *Joint Intelligence Doctrine,* 2-1 to 2-2.

Table 1 - Canadian and NATO Types of Intelligence

Type of Intelligence   **Definition**

of knowledge and foreknowledge in his writings.[57] This simplicity has not been

maintained in the US Army and Joint doctrines, although the general concepts can be

found under the titles of "categories of intelligence"[58] or "production categories"[59] at the

Army and Joint levels respectively. The concepts of current and target intelligence line

up neatly while basic intelligence becomes general military intelligence and warning

intelligence is indications and warnings (I&W) intelligence. Only the US joint realm

recognizes estimative intelligence. Two new categories are introduced however,

scientific and technical intelligence and counterintelligence, which Kent had rejected as

being inconsistent in meaning.

Intelligence as an Activity or Process

Two other areas where some degree of agreement between joint and army levels

occurs are in the eight principles of intelligence, and the four steps of the intelligence

cycle.[60] The intelligence cycle is the process used to obtain information and convert it

into intelligence. Current Canadian usage as shown in Figure 1 sees it occurring in four

stages, steps or phases which are considered to be: direction; collection; processing; and

dissemination.[61]

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[57]   Waltz, *Knowledge Management…,* 10-12.

[58]   US, FM 2-0 *Intelligence,* 2-5 to 2-7.

[59]   US, JP 2-0 *Joint Intelligence*, I-16 to I-19.

[60]   The eight principles of intelligence are: centralized control; timeliness; systematic exploitation; objectivity; accessibility; responsiveness; source protection; and continuous review. DND, *Field Manual - Intelligence*, 12.

[61]   DND, Joint Intelligence Doctrine, 2-3 to 2-15. DND, *Field Manual - Intelligence*, 25-27.
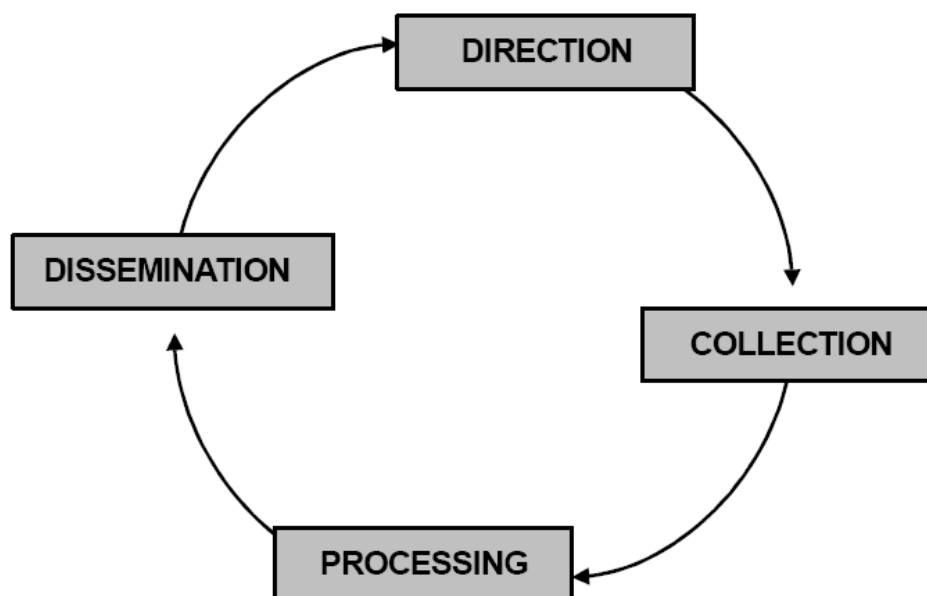
Figure 1 - Intelligence Cycle

Source: Canada. *Joint Intelligence Doctrine*. 2-4

The direction phase consists of those actions by the commander and his staff to provide direction to the collection of intelligence. It includes such activities as Intelligence Preparation of the Battlespace (IPB) and the intelligence collection plan. The following collection phase is that phase where the actual collection assets conduct their missions. The processing phase is where information collected is turned into intelligence through collation, evaluation, analysis, integration and interpretation. Finally the dissemination phase makes the intelligence accessible to users, through either written, graphic or verbal dissemination.

Competing Concepts – Information Operations et al

The RMA debate of the 1990s impacted upon Canadian doctrine as a variety of new concepts were introduced to try and leverage the perceived advantages of emerging

sensor and information technologies. As a result, in a little over a decade the Army

underwent three major shifts in its concept of applying fighting power.[62] These shifts all

resulted in subtle, and not so subtle, changes in the Canadian Army's perception of

intelligence and its thoughts on its organization.

At the end of the Cold War the Army espoused eleven combat functions, one of

which was intelligence. However in 1997 the Army made a switch to six combat

functions, in line with American thinking, and intelligence was subsumed into

information operations, along with information systems and electronic warfare. However

the accompanying American concept of Battle Operating Systems (BOSs), which

included intelligence, was not adopted. A mere four years later in 2001 the army

changed to five differently named operational vice combat functions. This resulted in the

sense function now taking ownership of intelligence (see Table 2). At present the bulk of

published Army doctrine manuals reflect the 1997-2001 functions and is only now

transitioning to the post 2001 construct.

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[62]   DND, *Land Operations*, 4-21.

Table 2 - Canadian Army Combat and Operational Functions - post 1990

Prior to 1997	1997-2001	After 2001
Combat Functions	Combat Functions	Operational Functions
Command and Control	Command	Command
Information Systems	*Information Operations*	*Sense*
Intelligence	Manoeuvre	Act
Electronic Warfare	Firepower	Shield
Close Combat	Protection	Sustain
Aviation	Sustainment	
Fire Support		
Engineer Support		
NBC Warfare		
Air Defence		
Combat Service Support		

Source: Canada. DND, *Land Operations*. Draft 2007, 4-21.

The adoption of Information Operations (IO) moved intelligence from a function

to a sub function. The means for doing so was the publication of the Canadian Army's

1999 IO manual, which was for the most part a modification of the American Army's

1996 FM 100-6 IO Manual.[63]   However the impact of the two manuals was different in

each country. The 2003 replacement manual, FM 3-13 IO, to the American Army's 1996

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[63]   If the CF IO Manual is compared to the US Army's FM 100-5 Information Operations, 27 Aug 1996, an amazing degree of similarities can be seen down, with the majority of the work a direct copy. The one major extension is the inclusion of an ISTAR chapter not seen or considered in the US version. Department of National Defence, B-GL-300-001/FP-001, *Land Force Information Operations* (Ottawa: DND Canada, 1999) and United States, Headquarters of the Army, FM 100-6 *Information Operations* (Washington DC: U.S. Government Printing Office, 27 August 1996).

FM 100-6 IO manual made no claims regarding the subordination of intelligence to

information operations.[64] In fact a close reading of FM 100-6 shows that it actually

limited its considerations of intelligence to a greater degree than did the Canadian Army

version. The Canadian Army version took the opportunity to significantly strengthen the

bond between intelligence and IO. The first paragraph in each manual differs

significantly in that FM 100-6 introduces intelligence in a paragraph filled with

references to C2W, C2, IW and IO where the Canadian Army manual is rewritten to a

broader scope and does not include this emphasis, instead choosing to excise them

totally.[65] This trend continued in later portions of that chapter. Table 3 illustrates some

of these alterations.

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[64]   United States, Headquarters of the Army, FM 3-13 *Information Operations: Doctrine, Tactics, Techniques and Procedures* (Washington DC: U.S. Government Printing Office, 28 November 2003).

[65]   US, FM 100-*6 Information Operations*, 4-3 and DND, *Land Force Information Operations*, 55.

Table 3 - Comparison Canadian and United States Army IO Manuals

Reference	Passage
On assessing friendly vulnerabilities.	"The first critical step in protecting **IO** capabilities is to identify specific and potential threats" (US)
	"The first critical step in protecting capabilities is to identify specific and potential threats **by means of a CI estimate."** (CA)
On understanding the adversary	"The effectiveness of **C2-attack** is predicated on…" (US)
	"The effectiveness of **offensive operations, including IO,** is predicated on…" (CA)
On Battle Damage Assessment (BDA)	"The intelligence system continuously assesses the effectiveness of **IO**... an important aspect of this *information BDA* ..." (US)
	"The intelligence system continuously assesses the effectiveness of **all combat operations including IO**… an important aspect of **BDA**...". (CA)

Source: DND, *Information Operations*, 55-60 and US, *Information Operations*, 4-4 to 4-7

In contrast to the enthusiastic acceptance of IO by the Canadian Army, the American manual triggered a wave of interest in American military writing. Both the *Military Intelligence Professional Bulletin* and the *Military Review* featured issues focusing on Information Operations.[66] One year after its publication Major General Thomas, commander of the US Army's intelligence training centre, stated that FM 100-6 "is a good start, but is essentially a work in progress."[67] The following year *The Military Review* raised the issue of a disconnect between the American Army's IO doctrine and an

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[66] *Military Intelligence Professional Bulletin,* Vol. 23 No. 1 (January-March 1997). *The Military Review*, Vol. LXXVIII No. 5 (September-November 1998).

[67] Major General Charles W Thomas, "Vantage Point", *Military Intelligence Professional Bulletin*, Vol. 23 No. 1 (January-March 1997), 2.

even more restrictive American Joint IO doctrine that had come out four months later at the end of 1996, which viewed IO only in terms of information and information systems.[68] When the American Joint IO manual, JP 3-13, came out in 1998 it was based on this more restrictive view which in turn influenced the American Army's 2003 FM 3-13 IO manual. An examination of American intelligence doctrine between 1996 and 2004, the date that the American Army's FM 2-0 *Intelligence* was released, shows no impact on how intelligence as a whole was defined. [69]

While this debate was occurring south of the border the Canadian Army moved forwards with its adopted doctrine. The American discussions regarding the relationship between IO and intelligence were ignored, as was the publication of a Canadian Joint IO manual in 1998 which also separated the two.[70]   IO and intelligence continued to be regarded as master and subordinate in the Canadian Army, to the point where the intelligence doctrine writer worked within the IO section.

Within IO were two other concepts which injected a high degree of confusion in Canadian thinking. The first was that of "relevant information" (RI), which was articulated as all information relevant to a commander's decision making. Thus the RI concept treated intelligence as a sub element, concerned with the adversary and foreign nations.[71] This was a return to the pre-unification view of intelligence as a specific form

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[68]   Robert J. Bunker, "Information Operations and the Conduct of Land Warfare". *The Military Review*, Vol. LXXVIII No. 5 (September-November 1998), 4-17.

[69]   For example FM 34-8-2, *The Intelligence Officers Handbook* includes FM 100-6 in its bibliography but makes no mention of IO in its contents. United States, Headquarters of the Army, FM 34-8-2 *The Intelligence Officers Handbook* (Washington DC: U.S. Government Printing Office, 1 May 1998).

[70]   Department of National Defence, B-CG-005-004/AF-033 *CF Information Operations* (Ottawa: DND, 15 April 1998).

[71]   DND, *Land Force Information Operations*, 51-52.

of information. As Davies observed, this was a British vice American view which may have been one of the reasons for the rejection of this concept by the American intelligence community.

The second concept was a British one, the ISTAR concept. [72] This idea had been warmly received by the Canadian Army, and as a result it was inserted as an entirely new chapter in the IO manual. This resulted in intelligence awkwardly subordinated to both a plagiarized American RI concept and a synthesized Anglo-Canadian ISTAR one.[73] These concepts were subsequently reflected in a series of subordinate manuals with two versions of an *Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR)* manual (2001 and 2004) with an *Intelligence* manual (2001) at the bottom of the hierarchy.

Prior to this it was quite clear that the Canadian Army had used the already introduced NATO definition.[74] However the introduction of RI now posed additional complexity, obscuring a clear definition with an inversion of the relationship between intelligence and information. This muddying of the waters was not restricted to the Army,

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[72]   The concept had initially been expressed as Reconnaissance, Intelligence, Surveillance and Target Acquisition (RISTA) before making the switch to ISTAR. Lieutenant-Colonel M.J. Cronin, "Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) support to Land Operations" *UK Army Doctrine and Training News,* No.7 (May 1997), 1-34 to 1-43.

[73]   Chapter 4 concerns RI from the American model, while Chapter 5 interjects ISTAR. RI was defined as "information drawn from the Military Information Environment (MIE) that significantly impacts, contributes to, or relates to the execution of the operational mission at hand". ISTAR was introduced as a concept defined as "a structure within which information collected through systematic observation is integrated with information collected from specific missions and processed in order to meet the commander's intelligence requirements. It also permits the detection, identification and location of targets in sufficient detail in a timely enough manner to allow their successful engagement by weapons systems." The definition further breaks down the system components as sensors, processors, an information and sensor management system and a system of communications linking ISTAR assets and the commander. DND, *Land Force Information Operations*, 51-71.

[74]   DND, *Combat Intelligence*, 1-2.

as concepts like Information and Intelligence (I^2) were also being expressed at the Joint level and making their way into the *Canadian Military Journal*.[75]

Within the triad of the IO, ISTAR and Intelligence manuals the definition of intelligence bounces back and forth. In the first manual, IO, intelligence suffer first from being introduced with a new definition from an unknown source and second through the NATO definition truncated to only its first sentence, neglecting two of Kent's three "separate and distinct things."[76]

In the second manual, the 2001 edition includes the NATO definition in a footnote, while the 2004 edition avoids it totally.[77] Instead intelligence is reframed within the ISTAR concept as follows:

> Intelligence encompasses three elements: a product, a process and an organization. All three elements are included in the "I" in ISTAR. At the heart of the ISTAR capability are intelligence staffs and units that process data and information from single sources and generate the all-source intelligence needed by commanders to develop understanding and make informed decisions.[78]

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[75]　　　"The ISR process will integrate raw sensor data with processed Information and Intelligence (I^2)" Commander Josh Barber, "An Intelligence, Surveillance and Reconnaissance (ISR) Vision for the Canadian Forces," *Canadian Military Journal*, Vol.2 No.4 (Winter 2001-2002), 43.

[76]　　　"Intelligence is a term used to describe both the activities to acquire and process information and the product resulting from that process. Essentially intelligence is information and knowledge about a belligerent obtained through observation, investigation, analysis, or understanding. Source Unknown" DND, *Land Force Information Operations*, 55 and 64.

[77]　　　DND*, Intelligence, Surveillance, Target Acquisition and Reconnaissance*, (2001), 4.

[78]　　　ISTAR is also redefined in the manual, now becoming　"a grouping of information collection, processing, dissemination and communication assets designed, structured, linked and disciplined to provide situational awareness (SA) support to targeting and support to commanders in decision making." Department of National Defence, B-GL-352-001/FP-001 *Intelligence, Surveillance, Target Acquisition and Reconnaissance* (Ottawa: DND Canada, 2004), 94.

The third manual, Intelligence, demonstrates a distinct unease as it sets out to define intelligence. It starts by acknowledging itself as a core competency of ISTAR.[79] It then pays homage to the NATO definitions of information and intelligence before qualifying the last with: [80]

> In fitting the agreed NATO definition of intelligence into a framework of new Canadian army doctrine, we state that intelligence, as a product, is a key subset of RI that provides knowledge of the adversary, weather and terrain.[81]

At this point it appears that the Canadian Army maybe in danger of passing off a cognitive pretzel in lieu of the cognitive hierarchy previously described. Regardless of its subordination to RI and ISTAR, this relationship to knowledge is repeated throughout the Intelligence manual.

The Army is now in the process of moving from this construct to one where intelligence will now be subsumed by the sense function. It is explained in the Army's 2004 force employment concept as follows:

> **Sense** integrates sensor and sensor analysis capabilities into a single concept. This initiative breaks previous sensor and information stovepipes, allowing for comprehensive sensor fusion and all source analysis within a single system. This concept moves beyond the simple collection of data or information to provide commanders with timely and relevant knowledge.[82]

The sense function however will not be a clean break from the previous construct. It still intends to maintain the ISTAR concept, explaining that "sense is the concept,

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[79]   "Intelligence, as an activity, is a core competency within the realm of Information Operations (IO) and the central co-ordinating function in the Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) system of systems." DND, *Field Manual - Intelligence,* 1.

[80]   DND*, Intelligence, Surveillance, Target Acquisition and Reconnaissance*, (2001), 4.

[81]   DND*, Field Manual - Intelligence*, 2.

[82]   Department of National Defence, *The Force Employment Concept for the Army – One Army, One Team, One Vision* (Ottawa: DND, 31 March 2004), 13-14.

ISTAR is the action"[83] In developing the type of knowledge to be covered by sense the draft *Land Operations* manual offers that it must offer a "deep knowledge base" to the commander, which goes beyond merely weather and terrain to include political, military, economic, social, infrastructure and information elements.[84]

In contrast, new American doctrine has re-emphasized Intelligence within its latest framework. In contrast with the previous version of FM 3-0 *Operations* which employed both the concepts of the elements combat power and Battlefield Operating Systems (BOSs), the 2008 version rejected the BOSs and moved intelligence into one of the six warfighting functions.

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[83]   *Ibid*., 22.

[84]   DND, *Land Operations*, 4-32.

Table 4 - United States - Elements of Combat Power

2001 FM 3-0 Operations	2008 FM 3-0 Operations
Maneuver	Leadership
Firepower	Information
Leadership	Warfighting Functions
Protection	- *Movement and Maneuver*
Information	- ***Intelligence***
<u>*Battlefield Operating Systems (BOS)*</u> ***Intelligence****, Maneuver, Fires, Air Defence, Mobility-Counter-Mbility, Combat Service Support and Command and Control.*	- *Fires*
	- *Sustainment*
	- *Command and Control*
	- *Protection*

Source: United States FM 3-0 *Operations* 2001 and 2008.

In Canada, however, the successive impact of the IO, ISTAR, and now sense concepts, appear to have disrupted the Army's development of a coherent intelligence train of thought. The start state of a shaky American doctrine, injected with a British ISTAR concept, with iterative rationalization by a series of Canadian authors has split Army and Joint intelligence doctrine. By stressing information management concepts as the means to synchronize primarily observation-measurement capable sensors against the physical aspects of an adversary the more nuanced knowledge problem of employing textual capable sensors against the moral, psychological or cognitive aspects of the adversary tend to get pushed to the side.

The Intelligence Organization

In keeping with Davies argument that how an institution views and defines its intelligence concepts shapes the resulting organization it is now time to turn to how the Canadian Army has structured its intelligence organizations. The Army has tended to embed the Army's intelligence function within a commander's staff. This was the case in both World Wars, although the role of the battalion's reconnaissance platoon commander and the intelligence officer were often interchangeable. While the formation of an intelligence battalion was recommended at the end of World War Two, it was envisioned as a holding pool for intelligence personnel and not as a deployable entity.[85] The notable exception to this was the concept of the Brigade Group intelligence platoon, a small organization including counter intelligence, interrogation and imagery exploitation support, which existed both in doctrine[86] and as an ad hoc construct at the beginning of Canada's deployment into Cyprus in 1964 and for three rotations afterwards.[87]

When the Army's combat development process was considering the intelligence required to support operations in Europe against the Soviet Army it again raised the idea of deployable intelligence organizations. This time however the organization was not merely a warehouse for specialized collectors but was also seen as the focal point for intelligence processing for a formation. This resulted in a concept where intelligence platoons, companies, and battalions were included within brigade groups, divisions and corps in addition to the intelligence staffs. These line organizations would include a

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[85]   *First Canadian Army Final Intelligence Report*, 20-21.

[86]   DND, CAMT 1-36, *Staff Procedures….,* 114.

[87]   Elliot*, Scarlet to Green*, 552-559.

aheadquarters element, support assets, specialized collectors and an Intelligence, Collection and Analysis Centre (ICAC). This concept could be found in both the Corps '86 and Corps '96 intelligence structures and was a key element in the Draft 1988 Combat Intelligence Manual.[88] The Army 2002 plan envisioned implementing these structures, but the end of the Cold War and the 1989 budget allowed only the first year of the plan to be implemented. A 19 man intelligence company based upon a two shift ICAC platoon was fielded in Kingston in 1989.[89] This asset persisted until 2001 when its personnel were transferred into the Joint Headquarters staff and out of the Army.[90]

Current Army doctrine is oriented once more on the intelligence staff. However, the subordination of intelligence to the ISTAR concept has been reflected in the concept of the All Source Cell (ASC), an organization very similar to the previous ICAC.[91] While the ASC is described as a platoon it was subordinate to the ISTAR Coordination Centre (ISTARCC) in the ISTAR doctrine manual. The division of responsibilities between the two sees the ISTARCC responsible to "support brigade and unit level operations through the provision of timely, accurate, and relevant intelligence derived from a broad spectrum of sources fused to positively influence decision-making cycles" while the ASC is responsible to "provide analysis and collection coordination within the

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[88]   DND, *Introduction to the Corps '86 Concept*, 11-1 to 11-9. DND, *Combat Intelligence*, 3-5 to 3-12.

[89]   Rennet, "Army Intelligence in 2002", 11-16.

[90]   Harold A. Skaarup, Out of Darkness-Light: A History of Canadian Military Intelligence – Volume 3, 1998-2005 (New York: iUniverse, Inc., 2005), 397.

[91]   DND, Field Manual - Intelligence, 121-122. DND, Intelligence, Surveillance, Target Acquisition and Reconnaissance (2001), xxx. DND, Intelligence, Surveillance, Target Acquisition and Reconnaissance (2004), 9-26.

ISTAR system…".[92] This is quite a change from the original ASC concept in the 2001

Intelligence manual when it was introduced as the new term for the ICAC, responsible

for collection and processing. That manual only briefly mentioned the ISTARCC, but

did not elaborate on the relationship between the two.[93]

However, concurrent with the publication of this doctrine was the deployment of

an All Source Intelligence Centre (ASIC) by the Director General Intelligence in 2003

(the next chapter will discuss this in more detail). Initially a national, vice Army, concept

the development of doctrine for the ASIC has occurred between Joint and Army staffs,

and a recent Army News article in the *Canadian Army Journal* by an officer from the

Directorate of Army Doctrine described it as being equivalent to an intelligence

company.[94] Similar to the 1980s ideas of a line intelligence organization it consists of a

headquarters element, an ASC, and other intelligence or intelligence related functions as

shown at Figure 2 below. Interestingly the article maintains that "the ASC is an ICAC".

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[92]   DND*, Intelligence, Surveillance, Target Acquisition and Reconnaissance,* (2004), 9.

[93]   DND, Field Manual - Intelligence, 121.

[94]   Major Gordon Ohlke, "Army News – The All Source Intelligence Centre" *Canadian Army Journal* Vol.10.3 (Fall 2007), 5-9.
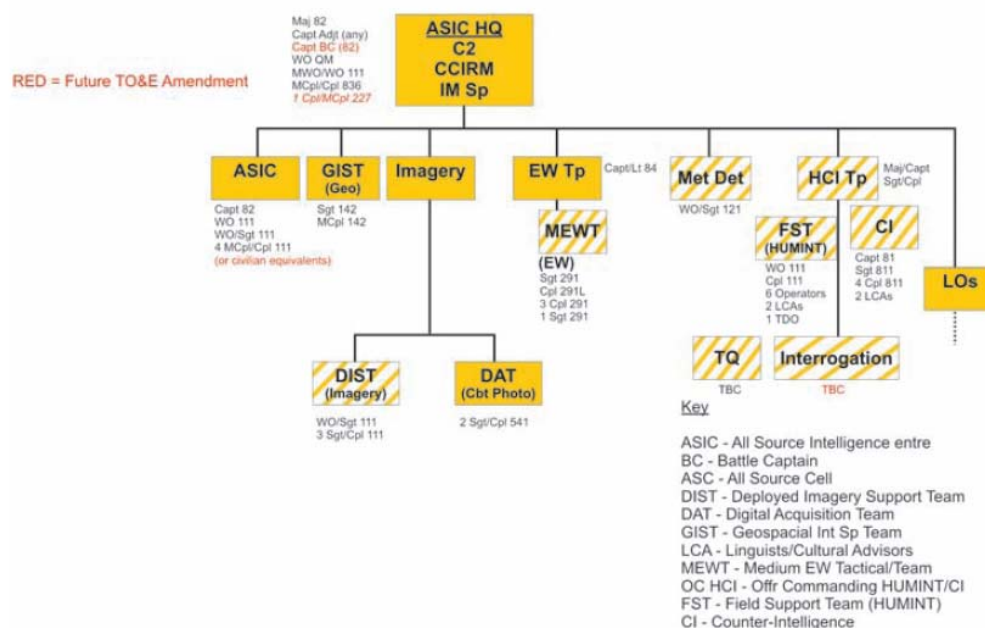
Figure 2 – ASIC Organization

Source: Ohlke, "Army News – The All Source Intelligence Centre" *Canadian Army Journal* Vol.10.3 (Fall 2007), 6.

Before leaving the intelligence organization, it is worth examining the issue of why an intelligence organization would exist. While at one level it can be explained that an intelligence organization exists to conduct the process that produces the product, it can also be beneficial to understand what roles or functions are assigned to intelligence organizations in doctrine to try and understand the output demanded from them in somewhat greater fidelity. Unfortunately current thoughts as to the role of an intelligence organization, whether staff or line, are mixed.

The Joint Intelligence doctrine includes both the role of intelligence and a list of key intelligence functions. The role is to "assist in the Commander's visualization of the

joint battlespace" by fulfilling the objectives of: providing warning; informing decision-making via predictive analysis; contributing to situational awareness; and countering the adversary's intelligence effort.[95] The functions include: indications and warnings, defined as a system and not a type of intelligence; intelligence preparation of the battlespace (IPB); common operational picture (COP) and situational awareness (SA); support to targeting; force protection; counterintelligence; and manage the intelligence function.[96]

Army doctrine expresses the goal of the intelligence cycle at the operational and tactical levels as being to produce intelligence for situational awareness and target development. While no equivalency to force protection is noted in the Army's doctrine, recent articles in the *Canadian Army Journal* have discussed either intelligence tasks or dimensions that include: situational awareness, targeting and force protection.[97]

The American Army uses a slightly wider view in articulating the tasks for its intelligence function which include: support to force generation; support to situational understanding; conducting ISR; and providing intelligence support to targeting and information capabilities.[98] Of note in these tasks is the one of support to force generation, an activity which is not directly occurring on the battlefield. This is a new construct for the Americans and a look at the previous intelligence doctrine focusing this task area instead on "support to strategic responsiveness" shows a fundamental shift in

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[95]   DND, Joint Intelligence Doctrine, 1-1.

[96]   *Ibid.*, 1-4 to 1-7.

[97]   Villeneuve,"A Study of the Changing Face…," 20. Ohlke, "Army News…," 8.

[98]   US, FM 3-0 *Operations* (2008), 4-4.

thinking.[99] No similar non-battlefield task is articulated in Canadian Joint or Army doctrine.

Discussion

The Canadian Army appears to be challenged to articulate its intelligence concepts and continues to grapple with its understanding of the boundaries of what is and what is not intelligence. Starting from the basis of intelligence as a specialized sort of information, a British model according to Davies, it began to move towards a model where information was a specific component of intelligence, an American model. Along the way the concept of knowledge began to manifest itself in the discussion, in keeping with Sherman Kent's treatise on intelligence.

The 1990s however appear to have disrupted elements of this train of thought as the Army adopted a soon to be orphaned American Information Operations doctrine and mated it with a British ISTAR doctrine. This re-introduced the concept of intelligence as a specialized sort of information with its subordination to the new construct of RI. It also redefined the organizational constructs of the 1980s as the ISTAR concept eventually manifested itself as an organization in the ISTARCC responsible for the provision of intelligence. The intelligence component of this construct, the ASC was subordinated to it and focused on analysis and collection coordination functions.

However, the external influence exerted by the Joint Staff in inserting the ASIC into operations in 2004 appears to be leading the construct of deployed intelligence organizations back towards the 1980s model of staff and line intelligence organizations, operating outside of the doctrinal ISTAR construct. How this doctrinal note in the

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[99]   US, FM 2-0 *Intelligence,* 1-3.

Canadian Army Journal gets translated into doctrine in the face of the even more all encompassing sense function that is about to overtake the information operations function remains to be seen.

Along the way though the Canadian Army appears to have either lost, or never fully developed, some of the basic intelligence concepts useful for articulating what is meant by intelligence, and what is expected from intelligence. As well, there appears to be a disconnect between how intelligence is viewed at the Joint and Army levels, with disagreements on such fundamentals as functions, tasks among other things. If Davies is correct, it is these basic concepts that will drive both what is done when we thinking we are doing intelligence, and what sort of organization we will adopt to do it. These differences then should be driving Joint and Army structures in differing directions.

To this end it is worth then noting both the inputs of Kahn and Herman regarding the kinds of intelligence, expressed either as *physical* and *verbal* intelligence or *observation-measurement* and *textual* intelligence. This will allow for consideration of both the complexity of displaying or articulating the two kinds of intelligence as well as the need to collect against both the physical and moral planes of the adversary.

Sherman Kent's classes of intelligence, be they expressed as classes or types also needs to be carried forward. The constructs of targeting and warning intelligence which where built upon his original triad of basic, current and estimative intelligence bear further examination as well. Similarly Kent's concept of intelligence as knowledge, and as developed within the knowledge management construct to include both *tacit* and *explicit* components, also needs to be considered further for the emphasis that it places

upon the establishment of individual expertise regarding an adversary or theatre of operations.

Finally, the concept of the strategic, operational and tactical levels of intelligence should not be dismissed based upon the theory that information technology has made them irrelevant. If decision making is conducted using different inputs at these levels, if there is a different emphasis upon a type or kind of intelligence in meeting the demands of the decision maker at that level, then there is value in differentiating between the levels. The emphasis is on structuring the product to that level of decision making, not upon the intelligence that can be produced by intelligence assets held at that level.

Finally, the functions or tasks of an intelligence organization, either staff or line, need to be simply articulated. As well, from the American inclusion of force generation in their intelligence tasks it is worth noting that if the tasks are only related to the battle field then other aspects of the function may be overlooked as they were never articulated, regardless of the enormity of their impact.

THE CANADIAN EXPERIENCE – POST-COLD WAR

"An Intelligence Officer has two primary jobs. The first is to report what is known about the enemy; the second is to use the resources of Intelligence to find out more. Those are full time jobs when we are in contact with a resourceful foe. Anything else takes away from them and must be secondary to them."

1st Canadian Army Final Intelligence Report, 1945[100]

Introduction

The years following the end of World War Two saw a Canadian Army whose overwhelming focus was fighting and winning a land war in central Europe against a large conventional adversary. The intelligence concepts that had developed up until the end of the Cold War were aligned to support this focus. When the Cold War ended, the Canadian Army was suddenly presented with a variety of alternative employment scenarios. The result of this was a continuous engagement in operations across the spectrum of conflict from 1992 onwards. These operations involved Army deployments from the subunit, or company size, up to skeletal formations, or reduced brigade groups, within a variety of command and control constructs. This chapter will look at the operations conducted since 1990 in which a land component was deployed to try and determine: the types of operations conducted; the size of the deployments; the duration of the deployments; the characteristics of the theatre; and the characteristics of the adversaries.[101] Only operations where combat elements (infantry, armour or

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[100]   *First Canadian Army Final Intelligence Report*, 3.

[101]   Three major sources were used to compile information on the operations in question. The Operational Research Division commissioned a study on Canadian Forces Operations 1970-2000 which actually exceeds those dates and stretches to 2003 by including the Five-W database of operations between 1990 through 2003. L.A. Milner and S. Maloney*, Canadian Forces Operations 1970-2000*. (Ottawa: Operational Research Division, Directorate of Operational Research (Joint), 2002). Information after that date can be found at the Canadian Forces Operations webpage, National Defence and Canadian Forces, "Operations", http://www.dnd.ca/site/Operations/current_ops_e.asp; accessed 13 Mar 08 and the Canadian

reconnaissance) were deployed will be considered as opposed to those missions which where combat support or service support oriented.

It will then consider the intelligence support to those operations, looking at the size and type of organizations deployed, based on writings on the Canadian post-Cold War intelligence experience began to become published in the late 1990s.[102]

<div align="center">The Operational Experience</div>

Types of Operations

The spectrum of conflict spans from absolute peace through to absolute or general war. Recently the Canadian Army has chosen to categorize it through the lens of major campaign themes. These themes are: major combat; counter-insurgency; peace support;

Expeditionary Forces Command webpage Canadian Expeditionary Forces Command, "Current Operations". http://www.cefcom.forces.gc.ca/site/ops/index_e.asp; accessed 13 Mar 08.

[102] In 1997 both the Somalia Enquiry's final report, *Dishonoured Legacy*, and the *Canadian Infantry Journal*, offered input from experiences in Somalia and Bosnia. See Martyn, "On the Future of Intelligence in the Canadian Infantry," *Infantry Journal*, No.32. (Summer 1997), 38-45.

Additional articles slowly followed, appearing in The Army Doctrine and Training Bulletin (ADTB) in 1998 and 2000 and The Bulletin from the Army's Lessons Learned Centre in 2001. It wasn't until after forces deployed to Afghanistan that source material became openly available. Both in the form of additional articles in The Bulletin, The Canadian Army Journal and The Canadian Military Journal and through academic papers such as Brigadier-General (retired) Cox's thesis. James Cox, "The Transformation of Canadian Defence Intelligence since the End of the Cold War" (master's thesis, Royal Military College of Canada, May 2004).

More recently, a trilogy of volumes on the Canadian Intelligence Branch have been privately published by Major Hal Skaarup, *Out of Darkness – Light: A History of Military Intelligence, Volumes 1-3*. These volumes can be more properly thought of as scrap books than as an authoritative history, but they do contain extracts from authors of articles published in internal Intelligence Branch newsletters and journals not normally accessible and thus provide access to first hand reporting on some deployments. A review in the *Canadian Army Journal* considers these volumes to be useful, but lacking in attempting to answer any "so what" as to the development of the Canadian Intelligence Branch. See Dr Bob Martyn, "Out of Darkness – Light: A History of Military Intelligence, Volumes 1-3" *Canadian Army Journal* Vol.9.3 (Winter 2006), 100-103.

peacetime military engagement; and limited intervention.[103] As peacetime military

engagement focuses on capability development in, or with, friendly foreign nations it will

not be considered further.
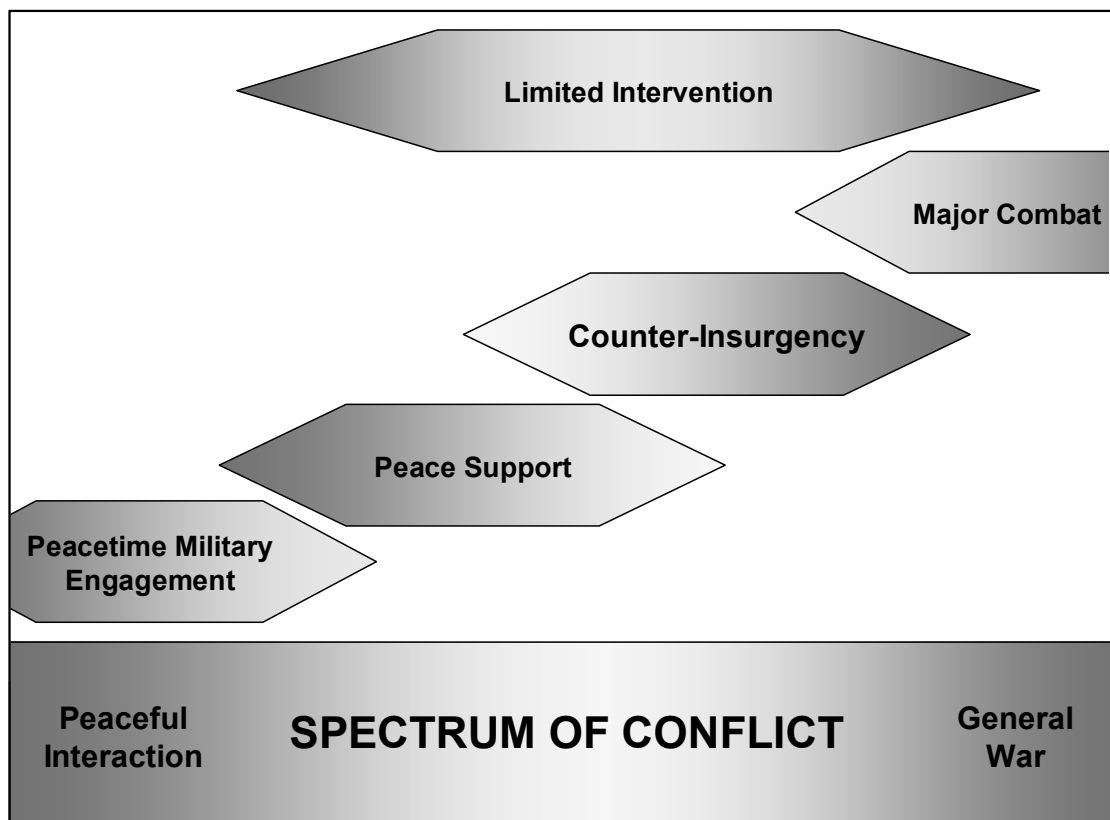
Figure 3 - Predominant Campaign Themes across the Spectrum of Conflict
Source: DND Land Operaionts, 3-17

While the major combat theme dominated Canadian Army training and thinking

during the Cold War, the Army was to acquire little experience in it during the post-Cold

War period. While the Canadian Forces as a whole has engaged in three major combat

operations since the end of the Cold War, it was only recently that the Canadian Army

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[103]   The Canadian Army has introduced the concept of Campaign Themes to characterize the character
of a campaign, which may change over time. Canada. Department of National Defence. B-GL—001/FP-
000, *Land* Operations, DRAFT 2007, 3-10 to 3-20.

was engaged in one.[104] This was the initial 2002 deployment of Canadians into Kandahar as part of Op APOLLO. While the initial deployment was against the remnants of the recently defeated Taliban government, the forces involved were in the process of transitioning out of the combat theme and either into a peace support, or counter-insurgency theme.

Where the Army gained most of its experience, at least initially, was at the other end of the spectrum in peace support operations. While some of these paralleled reasonably traditional United Nations peace keeping missions, such as Op ECLIPSE along the Ethiopia-Eritrea border in 2000-2001 or Op TOUCAN in East Timor in 1999-2000, others did not. Missions in the Balkans between 1992-95 (Op HARMONY-Croatia and Op CAVALIER-Bosnia) where much more contested, and did not enjoy the cooperation of the belligerents.[105] The Dayton Accord however restored some order and Canadian involvement in the Balkans theatre after 1995 swung back towards the mid to lower end of the peace support theme during Ops ALLIANCE and PALADIUM until its eventual close-out in 2004.[106]

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[104]   The other two combat operations relied upon the Canadian Air Force to carry the fight to a conventional enemy in both Iraq and Kosovo. While there was a substantial naval component in the 1st Gulf War, it did not oppose a conventional enemy given the overmatch of Coalition to Iraqi forces. Land forces deployed to the Gulf in 1990-91 were for the force protection of the field hospital, the Joint Headquarters and the operating airfield for the CF-18s. While plans were considered to deploy a Canadian Brigade to the Gulf, they were not implemented. The 1999 Kosovo operation was followed immediately by a land centric peace support operation.

[105]   At one point during Op HARMONY in 1993, in an attempt to prevent ethnic cleansing, elements of a Canadian battle group engaged in prolonged firefight with Croatian troops.   Michael Snider, "Firefight at Medak Pocket," *Maclean's Magazine*. Toronto: September 2, 2002, 44-47.

[106] The Dayton Accord was signed on 14 December 1995 and brought the conflict in Bosnia to a halt, setting the conditions for a peace with a withdrawal of belligerents to be supervised by NATO. Internet. http://www.nato.int/ifor/gfa/gfa-home.htm, accessed 17 March 2008.

The other element introduced into the peace support campaign theme was operations in failed or failing states with the aim of restoring order and alleviating suffering. The Canadian deployment to Somalia in 1993, Op DELIVERANCE, was one example of this. Another would be the succession of operations in Haiti from 1995 to 1997, Ops PIVOT, STANDARD, STABLE and CONSTABLE, which would be repeated again in 2004 with Op HALO.

In contrast with the first deployment into Afghanistan, the second deployment in 2003 to Kabul, Op ATHENA, while in the peace support theme, shared more common elements with the counter-insurgency theme as it began to engage, and be engaged by, insurgents and terrorists. When the main effort of the mission moved from Kabul to Kandahar in 2005 and combat operations commenced as part of Op ARCHER under the US led Op ENDURING FREEDOM (OEF) the theme of the campaign did switch to counter-insurgency as fighting became more prevalent. The operation was continued, albeit under a NATO mandate since in mid-2006, when the operation name changed back to Op ATHENA.[107] Currently it appears that this operation will involve Canadian troops through to 2011.[108]

Limited interventions in the Canadian context have involved humanitarian relief efforts centred around the Disaster Assistance Response Team (DART). Although, as the

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[107] Op ATHENA referred to Canadian troops operating under NATO, while Op ARCHER to those under OEF. Canadian troops have operated under both operations simultaneously in a variety of positions, but the main effort of combat element the Canadian mission has been either under one or the other.

[108] On 4 April 2008, Prime Minister Harper announced that the pre-conditions for the employment of Canadian troops in Kandahar province through to 2011 had been met. These included the provision of an additional 1,000 NATO troops to the province along with the acquisition of unmanned aerial vehicles and medium lift helicopters to support operations. Steven Chase and Gloria Galloway, "PM Leaves Door Open to Extend Afghan Mission" *The Globe and Mail,* 4 April 2008, A12; http://proquest.umi.com; Internet; accessed 17 Apr 2008.

2006 evacuation of Lebanon showed, a non-combatant evacuation operation (NEO) remains a future possibility requiring Army participation along with the requisite intelligence support to ensure the safe removal of Canadian nationals from areas of conflict.

Deployment Size

Within the Canadian Forces organizations are grouped as subunits, units or formations. [109] The unit is normally the smallest organization capable of independent action, and examples in the Canadian context are an infantry battalion or armoured regiment. A subunit generally operates within the context of a higher unit and lacks the additional support or command functions for independent operation. As a result Canadian subunits have generally deployed as part of a multi-national unit. Above unit is the formation, a grouping of units along with additional command and support enablers making it capable of considerable autonomy.

Generally Canada deployed land forces at the unit level, although sometimes they have been of mixed composition, or have a reduced number of subunits. Examples of this were the Haiti deployments, with Ops PIVOT, STANDARD, STABLE and CONSTABLE employing a two company "small reconnaissance battalion". Deployments in the Balkans were based on infantry battalions or armoured regiments with a mix of subunits and as Op PALLADIUM progressed the battalion was eventually reduced to two companies. Op KINETIC in Kosovo started at the subunit level but within two months had grown to a unit level deployment including a troop of tanks. Operations in Afghanistan started with an initial light infantry battalion construct in

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[109] DND, *Land Operations*, 1-7.

Kandahar in 2002 and Kabul in 2003, before transforming to more heavily armoured

Light Armoured Vehicle (LAV) battalions upon the move south to Kandahar. Eventually

they become true battle groups, incorporating a tank squadron, beginning in the fall of

2006.

Subunit deployments have been based on either infantry companies or

reconnaissance squadrons. Ops TOUCAN, ECLIPSE and HALO are examples of the

infantry company group construct. Both the last rotation of Op PALLADIUM in 2004

and the Canadian contribution to Op ATHENA in Kabul for three rotations in 2004-2005

are examples of the reconnaissance squadron one.

The need to operate more closely with the civilian elements in peace support and

counter-insurgency operations has seen the emergence of constructs such as the

Provincial Reconstruction Team (PRT) in Canadian deployments in Afghanistan.

Starting in the summer of 2005 this organization, arguably company sized, provided the

first Canadian presence to the US led OEF. It subsequently became a subunit of a

Canadian battalion, and later an independent unit under Canadian formation command.

In a similar vein, although arguably below the subunit level, Canada participated in the

Liaison Observation Team (LOT) initiative adopted in Bosnia starting in 2004.

Canada has not yet deployed a complete formation. It has however either

deployed complete Canadian formation headquarters to command units from several

nations, or has participated or led the manning of multinational formation headquarters.

An example of the first practise were the two 1995 Op ALLIANCE deployments to

Bosnia under the Intervention Force (IFOR). Based on the 2 CMBG and 5 GMBC HQs,

they commanded a grouping of Canadian subunits (an infantry company, a

reconnaissance squadron and an engineer squadron) as well as a Czech mechanized infantry battalion.[110]

The development of the Headquarters of Joint Task Force Afghanistan (JTF-Afg) since the fall of 2006 has resulted in a new Canadian formation headquarters construct. This headquarters has transitioned from its more or less traditional role as a National Command Element (NCE) into a dual role operational and national headquarters. As an operational headquarters within the NATO construct it is known as Task Force Kandahar (TFK) and it conducts operations within Kandahar Province with forces under command. Its role at the operational level has been expressed as turning Canadian strategy into tactical activities as JTF-Afg, but it can also be thought of as operating just above the operational-tactical boundary in providing the framework for sequencing tactical activities within the province as TFK in concert with RC(S) and ISAF direction.[111] Initially an ad hoc headquarters, it has since been drawn from an existing brigade headquarters, starting with 5 GBMC in the summer of 2007.

The other model, where Canadian brigade headquarters serve as the nucleus for multi-national headquarters, occurred in Kabul, Afghanistan in 2003 with 2 CMBG providing the majority of staff (64%) for the headquarters of the Kabul Multinational

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[110]   A politically mandated 1,000 man manning cap restricted the size and composition of the Canadian contribution. Lieutenant-Colonel Robert S. Williams and Major Jim Godefroy, "Note to File – On the Evolution of Intelligence Support under IFOR" *Canadian Army Journal* Vol. 9.3 (Winter 2006), 90-94.

[111]   Forces under command have normally consisted of the Canadian Battle Group, the Provincial Reconstruction Team (PRT) and other brigade level assets as well as units or subunits from other nations. Colonel Lewis, Deputy Commander JTFA, made the observation in regards to the national role on the first rotation. Colonel Fred A. Lewis. "The Ability to do Old Things in New Ways – Counter-Insurgency and Operational Art". *Canadian Army Journal* Vol 9.3 (Winter 2006), 17.

Brigade (KMNB) the remainder coming from 15 other countries.[112] It was followed by 5

GMBC which operated under a similar arrangement. In addition to a Canadian battalion

group, these headquarters commanded a variety of brigade level assets, such as

helicopters, unmanned aerial vehicles and intelligence assets in addition to French and

German battalions as well as a British company.[113]

Similarly, when Canada took over command of Regional Command (South)

(RC(S)) in Kandahar in 2006 the headquarters was based on 1 CMBG HQ, again with a

sole Canadian battalion under command. As part of the transition to NATO this grew to

include British, Dutch and Romano/American units. The eventual mix of Canadians in

this headquarters was lower (50%) than in KMNB and during the second Canadian lead

in 2008 it was down to only 25% of the positions.

These mixed headquarters pose significant intelligence challenges. The first is in

the realm of intelligence sharing, as in some theatres the available and useful intelligence

tends to be derived from standing bilateral or multilateral partnerships, vice the coalition

constituting the headquarters. This often results in the segregation of the staff.[114] The

second is the added force generation difficulties in generating senior intelligence

personnel for these staffs while concurrently supporting the Canadian contribution.

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[112]	Major Dany Fortin, "The Challenges of a Multi-National Headquarters – Kabul Multi-National Brigade," *The Bulletin (The Army Lessons Learned Centre)* Vol.11 No.4 (April 2005), 10-12.

[113]	Brigadier General Peter Devlin, "Canadian Soldiers deploy to the Kabul Multi-National Brigade – July 2003" *The Bulletin (The Army Lessons Learned Centre)* Vol.10 No.4 (June 2004), 2.

[114]	As an example in KMNB the G2 was German, and therefore was denied access to intelligence restricted to Canada, the United Kingdom and the United States (CANUKUS). Similarly, some members of the intelligence staff were not from NATO nations, and could not be provided with NATO intelligence. Finally, the Canadian Brigade Commander also had access to exclusively Canadian information via Canadian intelligence communications. Fortin, "The Challenges…," 13.

Duration of Deployments

The Army has tended to deploy for missions that last for more than one year, requiring a rotation of troops. In some cases the deployment size may have varied during this time, or a gap in the deployment may have occurred.   Exceptions to this were Ops TOUCAN, ECLIPSE and DELIVERANCE which were all for six months. All three operations were into regions were Canadian troops had not previously deployed, and have not deployed since.

Operations in Haiti have been a recurring theme, predating even the end of the Cold War with abortive Op BANDIT in 1987-88 which planned to land an infantry battalion to conduct a non-permissive evacuation if required. A similar need in 1993 saw Op DIALOGUE place a company from the Airborne Regiment on standby of one month for another possible Haitian evacuation scenario. After the 1995 deployment however Canada stayed engaged continuously for 33 months through to 1997. Six and a half years later Canadian troops again entered Haiti for Op HALO for a short six month tour.

Operations in the Balkans writ large spanned more than a decade, from 1992 through 2004 in terms of conventional unit and subunit deployments before transitioning to the Liaison Observation Teams (LOT) from 2004 to 2007. Prior to the 1995 Dayton Accords Op HARMONY conducted seven rotations in Croatia, and Op CAVALIER another six in Bosnia. After Dayton the two rotations of Op ALLIANCE were followed by fifteen rotations for Op PALLADIUM in essentially the same area of operations. The LOTs continued to work in this area for another two and a half years. Expanding the Balkan foot sprint slightly was Op KINETIC, which lasted two tours in Kosovo.

While the initial deployment of an infantry battalion to Afghanistan in 2002 was only for six months after returning to Kabul in 2003 the Canadian Army has remained continuously engaged in that country. The Kabul deployment stretched over five rotations from 2003 through until 2005 and the Kandahar deployment, running from 2005 to 2011 could add another dozen more.

Characteristics of the Theatre

The post-Cold War theatres were very different from the environment envisioned for the Canadian Army during the Cold War. In addition to much longer deployments, there was a change in the size of areas of operations. During the Cold War battalions were envisioned as operating within a reasonably small area, up to four kilometres wide and ten kilometres deep, and were generally envisioned in linear and contiguous terms. [115] The actual mission areas encountered by Canadian units were much larger, with gaps usually appearing as assets could not cover all of the assigned areas. This resulted in the deployment areas that were non-linear, and were increasingly characterized as non-contiguous. The companies deployed on Op TOUCAN and Op ECLIPSE covered larger areas, areas of over 800 square kilometres[116] and 3,200 square kilometres (40 by 80 kilometres)[117] respectively. Similarly the battalion area began to expand, from up to 900

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[115]   Canada. Department of National Defence. *BG-GL-301-002/FP-001, The Battle Group in Operations* (Ottawa: DND, 18 March 1993), 4-22.

[116]   Warrant Officer J.M.A. Chartrand and Master-Corporal Eric J.M. Brillon "Op TOUCAN – Int Ops with the 3rd Vandoo Airborne Company Group", *Intelligence Branch Association Journal* Issue 2 (2000) 5-6, quoted in Skaarup, *Out of Darkness… Volume 3..*, 7.

[117]   Warrant Officer M.R. Tracey, "Information Operations – How important is HUMINT or HUMINT – Who knows the Truth?" *The Bulletin (The Army Lessons Learned Centre)* Vol. 8. No.2 (September 2001), 2.

square kilometres during Op CAVALIER [118] to half of Haiti. Today operations in

Kandahar province take place over an area over 50,000 square kilometres (up to 300 by

300 kilometres in places) and when 1 CMBG took over Multinational Brigade (South) it

had an operating area covering six provinces that stretched over 800 by 500 km.

In addition to increased spaces, there has been increased contact with local

civilians with some missions including significant urban centres. Port au Prince and

Kabul are both cities with more than two million inhabitants encompassed by the urban

sprawl and Kandahar City is just under one-half million.   In Bosnia, Canadian troops

generally did not operate in such large urban areas, an exception being during Op

HARMONY in Sarajevo itself in 1992, and populations ranged from a small city of

50,000 downwards.

In keeping with these increased civilian roles, there has been an increased

emphasis on the relationship with the local power structures. In more traditional peace

support operations such as Op ECLIPSE or Op TOUCAN there was a need to be

perceived as free from bias. Indeed this was a major factor in limiting the deployment of

intelligence personnel initially into the Balkans, a carry over from the Cyprus peace-

keeping experience. For this reason the deployed Canadian Forces tended to maintain an

arms length relationship with official power structures in some areas. If however the

mission was to support, or assist in the reconstruction of a local power structure such as

in Haiti, or Bosnia in the later years of Op PALLADIUM, this relationship could change

significantly.[119] Interestingly enough the situation at the start of Op HARMONY soon

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[118]   Major D. Villeneuve, "Intelligence Support to Operations "You Get What You Pay For"", *The Army Doctrine and Training Bulletin* Vol.3 No.2 (Spring 2000), 19.

[119]   Cox, "The Transformation of Canadian Defence Intelligence…," 63-64.

became one of being targeted by both sides, albeit in an unbiased fashion. When the operation changes to a counter-insurgency, such as now being encountered in Afghanistan, the relationship with local power structures begins to dominate the mission. In some respects capacity building of critical power structures, for example military and police, can become as important as, or more important than, actions taken against adversaries.

Finally after years of preparing to operate in a NATO environment, either alongside German or American forces, Canadians found themselves operating within a variety of alliance structures. These ranged from UN or general multi-lateral coalition such as Ops HARMONY and CAVALIER through to the US led coalition of Operation ENDURING FREEDOM. In the first case the coalition tends to have a limited ability to provide additional support to the Canadian land component. In the second case such support can far exceed that which could normally be provided by Canadian assets, especially in areas such as intelligence and air support.

Characteristics of the Adversary

While the Army considers adversarial threats to be either conventional or irregular,[120] within the scope of the operations discussed the types of adversaries encountered can be typified as either: former belligerents; current belligerents; obstructionist factions (including militias, warlords and criminal elements); and enemies or opponents of the mission. Belligerents are primarily composed of conventional forces, although some paramilitary forces may exist.

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[120]   DND, *Land Operations*, 2-2.

Op ECLIPSE provides a good example of former belligerents. The Ethiopian and Eritrean militaries worked with the Canadian infantry company to meet the objectives of the mission, albeit with some attempts to gain an advantage or maintain superiority over the other in the event of a resumption of hostilities.[121] Generally however there was little direct threat of action by the belligerents against the Canadian troops. Operations in Bosnia after the Dayton Accord also would see the former warring factions (Croatian, Serbian, Bosnian-Serb, Bosnian-Croat and Bosniac) fit into this sort of example.

Prior to the Dayton Accord, the situation in Bosnia was much more of one where the adversary was a current belligerent, intent on continuing to advance its aims by force by breaking UN cease-fires or even by engaging UN forces. A good example of this would be the action already mentioned at the Medak pocket during Op HARMONY. Since 1996 Canada has managed to avoid situations where it has been deployed between current belligerents.

Obstructionist factions refer to elements below that of belligerents, former or current. They may co-exist with the other sorts of adversaries. They are generally elements which stand little to gain by the success of the mission as it will restrict their current activities. Examples have included criminal gangs in Haiti and warlords in Somalia. Some of the same elements have arisen in Afghanistan as well, related both to the poppy trade and to traditional non-governmental power structures, ie regional strongmen or warlords. Dependant upon how they are treated, obstructionists may be transformed into either allies or opponents of the mission.

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[121]   Tracey, "Information Operations…," 2-3.

Enemies or opponents of the mission are those that stand in direct opposition of the mission, desiring instead a radically different end state. This was not been the norm during the 1990s, but operations in Afghanistan since 2002 have been characterized by this type of adversary, where enemies such as the Taliban are engaged in a counter-insurgency battle with Canadian troops.

<div align="center">**The Intelligence Experience**</div>

The Canadian Army Intelligence Organization

In contrast with the lofty organizational aspirations of the intelligence units of Corps '86 and Corps '96 the Canadian Army actually had a very limited tactical intelligence capability in 1990. With the exception of the Canadian Airborne Regiment (CAR), all infantry and armoured units relied upon combat arms soldiers trained through combat intelligence courses to man unit intelligence sections. An intelligence staff, or G2 section, existed at each brigade along with a garrison intelligence staff in support of the army commander in St Hubert. A small reserve intelligence capability existed based on six militia intelligence sections collocated with the Service Battalions across the country.

As mentioned, the intelligence structure for Army 2002 drew heavily on the Corps '86 model to structure two intelligence companies for European and North American employment (with 80 and 105 personnel respectively) and three Augmentation and Readiness platoons (of 28 personnel each).[122] Only two parts of this plan were implemented in the wake of the 1989 budget. The first was the partial implementation of

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[122] Personnel would be a mixture of regular force and reservists drawn from the five Reserve Training Companies which would be re-established across the country from the existing militia intelligence sections. Rennet, "Army Intelligence in 2002," 11-16.

1 Intelligence Company in Kingston. This was restricted to only its first year build, and as a result instead of 80 personnel it totalled only 19.[123] The second part was the implementation of the Reserve Intelligence Training Companies, which significantly expanded Reserve Intelligence.

By mid decade, after the consolidation of the environmental Chiefs of Staff in Ottawa, the Army had settled on a construct that actually had fewer regular force intelligence personnel than before. The intelligence production capability of the staff in St Hubert vanished in the move to Ottawa, leaving only a few staff officers. The Army's 1996 plan was to focus on: retaining G2 staffs in all brigades along with the new Area Headquarters that had sprung into being in the intervening years; maintaining a deployable capability in the form of 1 Intelligence Company; utilizing a reserve intelligence platoon as the core of any contingency force; and using the reserve intelligence companies as augmentation sources to the preceding as required.[124]

The result of this plan was that intelligence personnel were seldom organic to the organizations with whom they deployed, resulting a significant regrouping and ad hoc organizations. As well, as shown in Figure 4 the overall numbers of regular force intelligence personnel diminished from 1992 to 2002 when they began a slow climb back again. One of the largest drops was the stand down of 1 Intelligence Company in 2000 and the transfer of its personnel out of the Army and into first the Joint Headquarters and eventually to Ottawa in 2006 to form the intelligence staff of Canadian Expeditionary

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[123] Author's personnel experience as a member of the unit from 1989 to 1991.

[124] Department of National Defence, Intelligence & Surveillance Combat Function Master Development Plan – Part A Intelligence (January 1996), 3-2 to 3-3 and Annex A.

Forces Command (CEFCOM).[125] Figure 4 also shows the increasing demand for

intelligence personnel to deploy. It should be noted that the numbers are for all regular

force intelligence personnel in the Army, including area and the land staff positions. The

number of personnel at brigade and below fluctuated between 30 and 40. It was an

increasing reliance on the intelligence reservists from the Reserve Intelligence

Companies, which allowed the deployments to be supported. [126]

Army Intelligence - Deployed Personnel
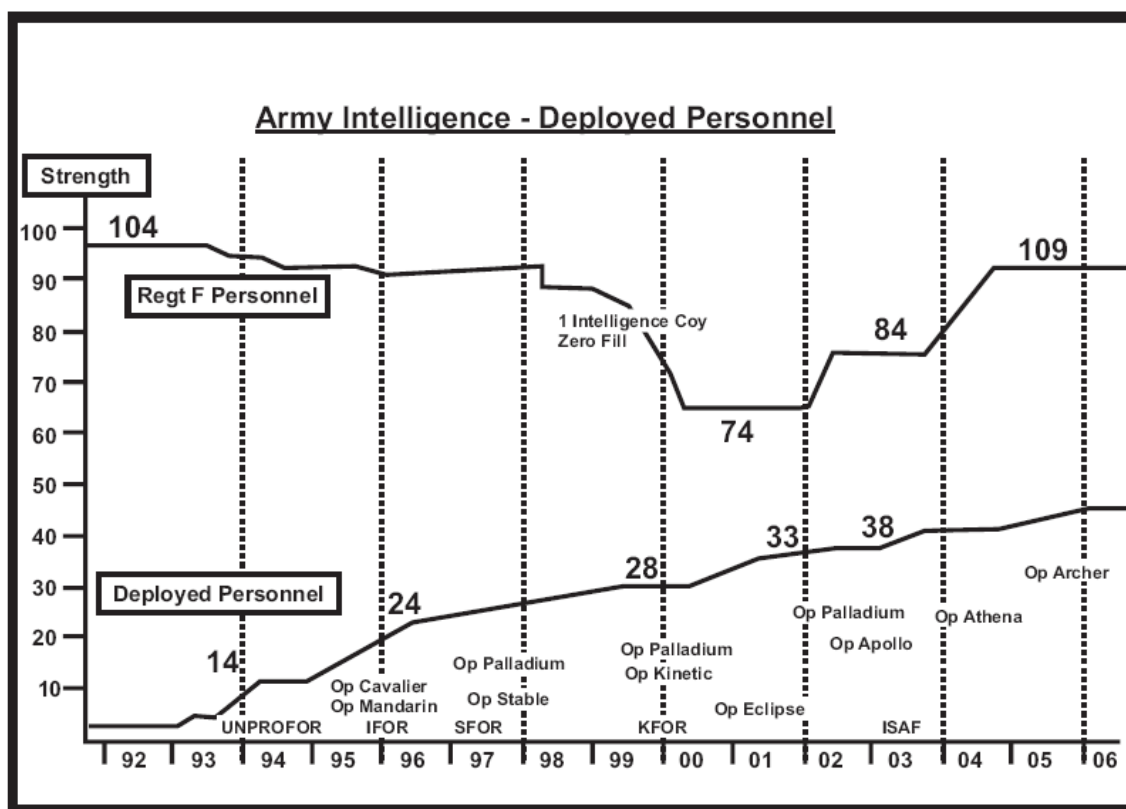
Figure 4 - Army Intelligence Personnel - Deployments and Strength

Source: Villeneuve, *Canadian Army Journal* Vol 9.2 (Summer 2006), 23

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[125]   Skaarup, *Out of Darkness… Volume 3…*, 397.

[126] Up to 40% of Army Intelligence positions on deployment would eventually be filled by reservists in Afghanistan. Canada. Department of National Defence. 3350-1 (COS Land Ops) "Guidance For Army Intelligence 2008" 13 March 2008, 16.

Two other important organization changes which have influenced Army intelligence on deployments have been the transformation of Defence Intelligence with the appointment of a Chief of Defence Intelligence (CDI) in November 2004 in place of the previous Director-General Intelligence (DG Int) which had been in place in since the end of the Cold War, and the stand up of Canadian Forces Expeditionary Command (CEFCOM) in 2006.[127] The organization of CDI, with all of the national intelligence collectors within one chain of command, has allowed for the fielding of increasingly robust national collectors in support of the Army on deployment.

The First Five Years after the Cold War

The initial post-Cold War peace support operations posed significant hurdles in developing Army intelligence. While previously there had been a considerable intelligence component to some peace support operations, recent Canadian experiences in Cyprus and the Middle East had established a culture where openness was a tool that supported the mission and intelligence activities were seen be detrimental to that.[128]

Intelligence was not absent however. When battalions deployed to the Balkans and Somalia they relied upon their integral intelligence sections. Thus the Canadian Airborne Regiment Battle Group (CAR BG) deployed to Somalia with a reasonably robust intelligence section based upon Intelligence Branch personnel. However, in the Balkans no coherent model was initially followed. While the initial battle group in 1992 fielding a section of intelligence operators under a combat arms officer. Generally however deployments relied upon the Cold War model where combat arms personnel,

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[127]   CDI Command Brief, 28 Feb 2008.

[128]   Dorn,"The Cloak and the Blue Beret: Limitations on Intelligence in UN Peacekeeping", *International Journal of Intelligence and Counter Intelligence,* Vol.10 (1997),

with the benefit of an all arms combat intelligence, were employed at the battalion level, and Intelligence Branch personnel served at brigade and above.[129] This dynamic changed in 1993 during the 12 RBC tour on Op CAVALIER when an Intelligence Branch Officer replaced the combat arms intelligence officer and by 1995 this had become the normal practise.[130]

Above the Canadian battle groups in the Balkans, the United Nations Command and Control structure did not initially field an effective intelligence structure at the UNPROFOR level.[131] Comments from a British battle group commander described the situation as "all suck and no blow" in that intelligence would only flow one way, upwards.[132] There were some minor adjustments to the intelligence structures in the battalions to provide for greater access to Canadian intelligence products to aid in force protection.[133] As the mission progressed Canadian intelligence branch personnel were deployed to UNPROFOR, and as information technology matured an intelligence link was established to support a Canadian Deputy Commander UNPROFROR in 1995.[134]

In Somalia, while the CAR BG was operating as part of the American 10th Mountain Division, a decision was made to maintain a Canadian Joint headquarters that

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[129]   E-mail, LCol Jensen, 14 Mar 2008. LCol Jensen was an intelligence plans officer with Director General Intelligence who debriefed the returning intelligence section in 1992.

[130]   Villeneuve states that this occurred in 1994 with 12 RBC, but that unit actually deployed in Nov 1993 according to the FIVE-W database. Villeneuve, "A Study of the Changing Face…", 26.

[131]   Cox, "The Transformation of Canadian Defence Intelligence…," 64.

[132]   Thomas Quiggan, "Response to: "No Cloak and Dagger Required: Intelligence Support to UN Peacekeeping,"" *Intelligence and National Security* Vol.10 No. 4 (Winter 1998), 204.

[133]   Cox, "The Transformation of Canadian Defence Intelligence…," 98.

[134]   *Ibid.,* 97.

would retain the CAR BG under command. While a small Canadian intelligence staff element had deployed with this headquarters, it had no collection capabilities and the result was that the CAR BG was isolated from the higher tactical level intelligence support available from the division.[135] When the Somalia Enquiry reviewed intelligence support to the mission it concluded that there was an initial misdirection of the intelligence effort towards the armed factions, when the real threat in the theatre was thought to be endemic thievery.[136]

When the Canadian battle group deployed in to Haiti in 1995, Canada had a lead role in the force headquarters and subsequently the bulk of the intelligence personnel went to that level, presumably to forestall the sort of problems observed in the Balkans.[137]

After Dayton, with NATO in the Balkans

The force that deployed after Dayton was based on a NATO structure, and as a result there was no resistance to the provision of intelligence support to a peace support operation. The initial NATO Intervention Force (IFOR) included an intelligence section within the Canadian Brigade headquarters. Like the Haiti experience, the main effort of for Canadian intelligence was above the battle group level during IFOR. When IFOR subsequently transitioned to the NATO Stabilization Force (SFOR) a year later there was no longer any requirement for a brigade intelligence staff and the main effort for

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[135]   *Ibid.,*72-77.

[136]   Canada, *Dishonoured Legacy – The Lessons of the Somalia Affair – Volume 3,* (Ottawa: Minister of Public Works and Government Services Canada, 1997), 878-896.

[137]   Captain J. Daniel Villeneuve, "A Farewell to Haiti" *The Intelligence Journal* Vol 1 Issue 1 (March 1998), 2-5 quoted in Skaarup, *Out of Darkness… Volume 3…*, 420-423.

intelligence subsequently moved to the battle group. In keeping with the practises established earlier intelligence personnel would be moved to what ever battalion as tasked with the mission to form the intelligence section. In 2004, when a reconnaissance squadron conducted for the last rotation it was augmented by a small three man intelligence section.[138]

For the first time, in keeping with NATO practises, Canada established a Canadian National Intelligence Cell in (CANIC) Sarajevo. Supported by secure intelligence information technologies it was colocated with other NATO NICs to provide intelligence to IFOR, provide theatre intelligence back to Canada, and support the Canadian contingent commander.[139] As it was initially under control of the Director General Intelligence in Ottawa, it favoured the first two over the third. But by 2002 this command and control arrangement was changed, and the CANIC was placed under command of the contingent commander, where it remained until 2002.[140] Canada has gradually co-opted the NIC terminology to apply to support to a Canadian national commander, often one employed within a multinational or UN headquarters, vice the original NATO construct of a sharing mechanism between national and NATO agencies.[141]

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[138]   Author's Experience. The author was deployed to Bosnia as the time as the Chief G2 for MNTF(SW).

[139]   Captain Phil R. Berikoff "The Gates of Madness", *Sinster Sam's Notebook* Edition 1, 1996, 10-11 quoted in Harold A. Skaarup, *Out of Darkness-Light: A History of Canadian Military Intelligence – Volume 2, 1983-1997* (New York: iUniverse, Inc., 2005), 327-329.

[140]   Major Mike Beauvais, "The Evolution of Intelligence Support to Canadian Military Operations," (Master's in War Studies student paper, Royal Military College, January 2004), 6-7.

[141]   Lieutenant-Colonel Villeneuve has suggested that the practise began when staff and communications where provided to a Canadian Command Element in 1992/93 vice the 1995 deployment. Villeneuve, "A Study of the Changing Face…," 35.

Intelligence support in Kosovo further built upon these experiences, employing both a dual hated CANIC/J2 staff with the contingent, a battle group intelligence section and a small combat intelligence trained section with the reconnaissance squadron.[142]

Company Operations – East Timor, Ethiopia/Eritrea

The operation in East Timor saw the first augmentation of an infantry company with a small two man intelligence section led by a Warrant Officer.[143] This company operated under a New Zealand Infantry battalion. The contingent commander was supported by a small J2 section with secure intelligence communications, initially afloat but eventually established on shore with the company.[144]

The same approach was used again almost a year later in Ethiopia/Eritrea. While the initial plan was to deploy combat intelligence trained personnel from the battalion intelligence section to the company instead intelligence branch personnel were deployed from elsewhere to fill the gap.[145] This time the company operated under a Dutch battalion. Once more the contingent commander was provided with a small intelligence staff with secure intelligence communications and a Canadian intelligence operator deployed with the force headquarters to improve intelligence liaison.[146]

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[142]   Sergeant Steve Mullins, "KFOR CANIC, Roto 1, Camp Donja Koretica Kosovo", *Intelligence Branch Association Journal,* Issue 2, (2000), 8-10 quoted in Skaarup *Out of Darkness… Volume 3…,* 73-75.

[143]   Warrant Officer J.M.A. Chartrand and Master-Corporal Eric J.M. Brillon "Op TOUCAN – Int Ops with the 3rd Vandoo Airborne Company Group", *Intelligence Branch Association Journal* Issue 2 (2000), 5-6, quoted in Skaarup, *Out of Darkness… Volume 3…,* 70-73.

[144]   Rear-Admiral Roger Girouard, "Operation TOUCAN Overview" *In Harms Way* (Kingston: Canadian Defence Academy Press, 2007), 32.

[145]   Tracey, "Information Operations…," 3.

[146]   "Task Force East Africa", Intelligence Branch Association Journal 1/2001, 9, quoted in Skaarup Out of Darkness… Volume 3…, 92.

The 2004 deployment into Haiti was at a time when deployments were being run in both Afghanistan and Bosnia and its intelligence architecture reflected these stresses. The Canadian Forces Joint Operations Group (CFJOG) headquarters deployed the nucleus of a Joint Intelligence Centre (JIC) to Haiti, augmented by intelligence personnel from across the Canada. Once in Haiti the JIC deployed an Intelligence Liaison Officer, and other assets, forwards to support the Canadian company group.[147]

Intelligence in Afghanistan

The battalion deploying into Kandahar in 2002 included a battle group intelligence section of intelligence branch personnel.[148] As the battle group was to operate as part of an American brigade an intelligence liaison officer was deployed with the brigade, although the release of American NOFORN intelligence products continued to be a problem throughout the tour.[149] While no intelligence staffs deployed to support a contingent commander, secure signals intelligence communications were deployed in lieu of a CANIC and the product made available to the commanders.[150]

When the following year a battalion deployed into Kabul it again had a battle group intelligence section, this time led by an intelligence officer with a mix of combat

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[147]   Lieutenant Commander Shawn P. Osborne, "Op HALO", *Intelligence Branch Association* Journal (2004), 21-23 quoted in Skaarup *Out of Darkness… Volume 3…,* 268-271.

[148]   Captain Philip E.D. Nicholson, "SITREP from 3 PPCLI BG Intelligence Section in Kandahar" *The Intelligence Branch Association Journal* 1/2002, 26-28 quoted in Skaarup *Out of Darkness… Volume 3…,* 141-143.

[149]   NOFORN, or Not for Foreign Release, is an American security caveat which can prevent the sharing of intelligence. Captain Philip E.D. Nicholson, "SITREP from …," quoted in Skaarup *Out of Darkness… Volume 3…,* 141. The Commanding Officer of the battalion also noted this issue, stating that "it prevented us from obtaining a lot of intelligence." Lieutenant-Colonel P. Stogran, "Fledgling Swans take Flight: The Third Battalion, Princess Patricia's Canadian Light Infantry in Afghanistan," *Canadian Army Journal* Vol. 7.3/7.4 (Fall/Winter 2004), 19.

[150]   Cox, "The Transformation of Canadian Defence Intelligence…," 163-164.

arms and branch personnel.[151] It operated within a multinational brigade intelligence architecture which, although the brigade was under Canadian command, was run by a German G2 with a Canadian deputy.[152] In a departure from previous deployments, the CANIC or contingent J2 capability was replaced by what was referred to as an All Source Intelligence Centre (ASIC). The ASIC integrated an intelligence cell drawn from 2 CMBG with a Geomatics, Imagery and SIGINT Team (GIST) of national assets drawn from the Canadian Forces Joint Imagery Centre (CFJIC), the Canadian Forces Information Operations Group (CFIOG) and the Mapping and Charting Establishment (MCE). With its secure intelligence communications it was able to both provide a Liaison Officer to commander KMNB while the bulk of the assets were co-located with the battle group and concentrated on long term analysis and exploitation.[153] The ASICs relationship with the battalion in Kabul was such that the battalion developed its own separate operational level targeting capability, relying upon the ASICs collection assets for support, but realizing that the ASIC analytical capabilities had been captured by the operational commanders.[154] The ASIC worked for the Canadian Commander of KMNB, and was tasked through the deputy G2. The figure below shows this construct in 2003.

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[151] Captain Cody Sherman, "Battle Group Intelligence Section," *The Bulletin (The Army Lessons Learned Centre)* Vol.10 No.4 (December 2004), 6-10.

[152] Major L. LeBlanc, "Intelligence Op ATHENA Roto 0," *The Bulletin (The Army Lessons Learned Centre)* Vol.10 No.4 (December 2004), 10-13.

[153] Captain Orest Babij, "ASIC/GIST Lessons Learned Op Athena Roto 0," *The Bulletin (The Army Lessons Learned Centre)* Vol.10 No.4 (December 2004), 1-4. Strangely, an additional success attributed to the ASIC was in the realm of Sensitive Site Exploitation and Document Exploitation, distinctly hands on and non-analytical functions given that both Counter-Intelligence and Human Intelligence collectors were not part of the ASIC on that rotation. Sherman, "Battalion Group Intelligence…," 8.

[154] Sherman, "Battalion Group Intelligence…," 8.
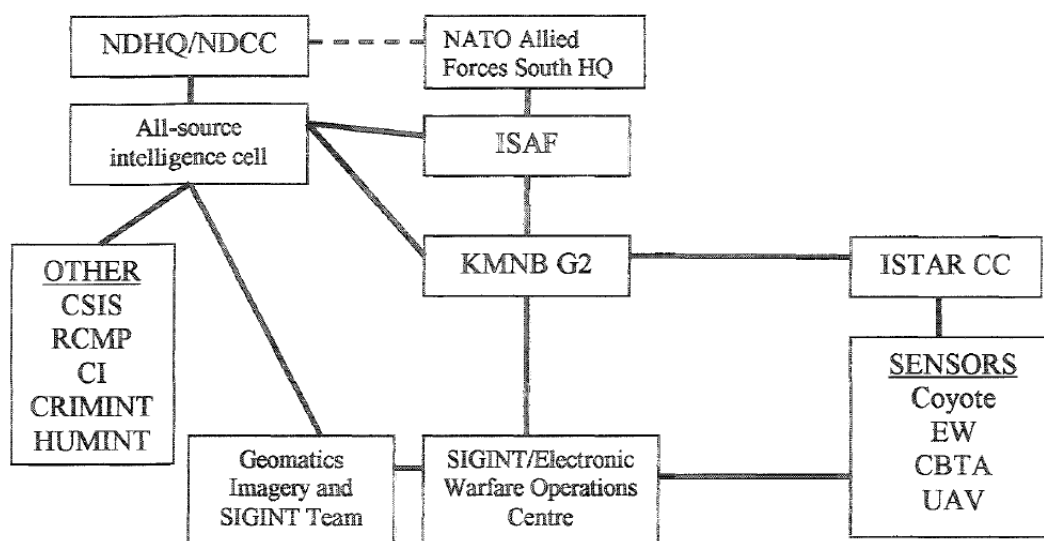
Figure 5 - Canadian Intelligence Architecture - Kabul 2003
Source: Diagram from Cox, 165

Deploying an ASIC in this manner was a shift in the way that national level collection and analysis assets could be integrated to support a tactical commander. Previously the systems and organizations deployed to support contingent commanders had focused on providing a communications means back to national strategic intelligence production. Changing technologies, and a change in organization, created the potential to integrate national assets into the tactical battle.[155]

The ASIC began to act as a focal point for the Canadian intelligence effort in Kabul. As the mission progressed some tactical collection assets were re-organized to come under its control. Part of the impetuous to do this came from the down sizing of the mission after the first two rotations to the reconnaissance squadron, which could not manage additional collectors. In keeping with the model established in East Timor and

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[155]   Beauvais, "The Evolution of Intelligence…," 7-9.

Ethiopia/Eritrea and the squadron did employ a small three man intelligence section for its own needs. Another factor in the change were coordination problems between national and tactical collectors that had been noted since the first rotation. Assets which initially had been deployed separately such as specialized Human Intelligence (HUMINT) collection teams, Counter Intelligence (CI) teams and Electronic Warfare (EW) detachments all became part of the ASIC.

When operations shifted south to Kandahar the stress of fielding larger and larger intelligence structures began to be felt. Starting with only a PRT in the transitional phase, a much larger intelligence structure was planned to support battle group and brigade operations under OEF starting in 2006. When initial planning defaulted to having only combat arms personnel in the battle group, drawing on the ASIC for support, the experiences of the past decade resulted in using intelligence reserves to staff most of the key billets. A small two man intelligence cell deployed with the PRT. Approximately 50% of the intelligence staff in the Multinational brigade headquarters where initially Canadian, although this dropped on succeeding rotations. When Joint Task Force Afghanistan (JTFA) was established in the fall of 2006 the structure also evolved to include a JTFA intelligence section.[156]

Parallel to supporting conventional operations, Canadian SOF are listed amongst the ASIC's clients in Afghanistan.[157] Canadian SOF appear to have deployed a similar ASIC like structure in support of their operations in Afghanistan, and may have been the

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[156]   Author's experience. The author was a J2 Plans officer in Ottawa at time.

[157]   An article in the *Canadian Army Journal* lists the current ASIC clients as including "Special Operations Regiment detachments". Ohlke, "Army News…," 8.

employing a GIST in operations prior to 2 CMBG Kabul experience in 2003.[158] The

SOF model may go by a different name and is called the called the Special Operations

Intelligence Centre (SOIC), and in contrast to some of the problems noted with the ASIC

in Kandahar, the SOIC has been cited as particularly effective in providing intelligence

support to SOF missions.[159]

Intelligence support from this initial structure does not appear to have been

without its problems. One weak area identified, and remedied, was that the dispersed

employment of the battle group resulted in dispersed company level operations that were

conducted on the basis of bottom-up intelligence developed through local contacts and

co-operation with local Afghan authorities.[160] The synchronization of ISR collection

assets into the company level fight has also been a challenge, although for differing

reasons. One commander has indicated that experiences with the first battalion in 2006

where such that ISR assets were not consistently available, being diverted to support

other troops-in-contact, including SOF, or plagued by a variety of elements of friction

such as incompatible technologies, communications issues and human error among

others.[161] However, the following battle group commander appears to have enjoyed more

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[158]   The GIST is cited as being deployed abroad in 2002, and references from the 2 CMBG roto make reference it to the 2003 Kabul rotation as being the first ASIC/GIST employment.   As the battalion deployment to Kandahar in 2002 did not appear to employ assets in this manner it is likely that this capability was deployed in support of SOF vice conventional forces. Major Louis-Henri Remillard, "The "All-Source" Way of Doing Business – The Evolution of Intelligence in Modern Military Operations," *Canadian Military Journal* Vol.8 No.2 (Autumn 2007), 21-22.

[159]   J. Paul de B. Tallion, "Coalition Special Operations Forces: Building Partner Capability," *The Canadian Military Journal.* Vol.8 No.2 (Autumn 2007), 54.

[160]   Major Jason T. Adair., "Learning on the Run: Company Level Counter-Insurgency in Afghanistan," *Canadian Army Journal* Vol 10.4 (Winter 2008), 31-32.

[161]   Lieutenant-Colonel Ian Hope. "Guest Editorial" *Canadian Army Journal* Vol 10.1 (Spring 2007), 6. Lieutenant-Colonel Hope also makes the observation that SOF operations against High Value Targets, such as Taliban leadership, would get priority over the battle group operations, see Lieutenant-Colonel Ian

ISR support and credits a combination of electronic warfare and unmanned aerial

vehicles for creating the conditions where he could achieve situational dominance at the

tactical level, reacting before the Taliban activities had reached the execution stage.[162]

Another observation made of the first two tours overall has suggested that there was a

shortfall in intelligence staff at the company level, which lead to problems in planning for

and integrating ISR assets.[163] As well, the communication of intelligence downwards

appears to have been a problem, being unable to sustain intelligence-led operations with

"subunits not receiving the type, quantity and quality of intelligence they believe they

require".[164] The ASIC does not appear to have been able to generate the operational

level intelligence required to understand the Taliban across Kandahar province, instead

becoming focused on the "tactical weeds level" of the local enemy.[165]

Discussion

When the Canadian Army left the Cold War it did little to restructure its

intelligence organizations. It remained structured for major combat with its tactical

intelligence personnel located at the brigade level with the implicit assumption that

someone else would provide the basic intelligence required to support operations. While

the Army's 1996 plan acknowledged a shift from the war in Europe to peace support

Hope, "Reflections on Afghanistan: Commanding Officer Task Force Orion," *In Harm's Way: Senior Military Commanders on Operations* (Canadian Defence Academy Press: Kingston, 2007), 215.

[162]   Lieutenant-Colonel Bernard Horn "In The Breach: The Combat Command of Lieutenant-Colonel Omar Lavoie," *In Harm's Way: Senior Military Commanders on Operations* (Canadian Defence Academy Press: Kingston, 2007), 239.

[163]   After Action Report 2006/2007, 12-13.

[164]   *Ibid.*, 12.

[165]   *Ibid., 4*. Lieutenant-Colonel Hope also indicates that he had to guess at the enemy's operational level objectives. Hope, "Guest Editorial," 6.

operations, it planned to use 1 Intelligence Company as a centralized pool of assets to reinforce deployments with augmentations from the Reserves and no adjustments were made below brigade level.[166] When this organization was removed, any hope of a centralized pool which could be tasked to provide basic intelligence or develop area expertise for the Army was dashed.

The intelligence requirements characterized by first peace support, and then counter insurgency, operations resulted in a demand for intelligence personnel to deploy at lower levels than previously planned for. Unfortunately the dispersal of intelligence personnel into the Area Headquarters, as support staff to the Reserve Intelligence Training Companies, and by the eventual dissolution of 1 Intelligence Company intelligence worked against this. Accordingly, support to deploying units and subunits and a variety of multi-national headquarters became more and more of an ad hoc affair as personnel moved from across the Army, the environments, and from Ottawa to create intelligence sections which were dissolved at the end of each deployment.

This approach could be expected to make organizational learning difficult. It also caused complications in developing standardized intelligence practises, making the creation and retention of Basic Intelligence problematic over the multiple rotations which characterized most operations.[167] The decentralized structure of Army Intelligence in garrison also meant that it was difficult to generate Basic Intelligence in support of upcoming deployments. This resulted in a lack of common intelligence preparation from

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[166] DND, *Intelligence & Surveillance Combat Function Master Development Plan…,* 3-1 to 3-3.

[167] Lisa Elliott, "Finding a Balance – A Study of the Canadian Army's Approach to Human Intelligence in an Asymmetric Environment" (master's thesis, Royal Military College of Canada, April 2005), 96.

rotation to rotation, leading to the deployment of intelligence generalists vice theatre smart intelligence analysts.

Regardless of this, the employment of intelligence underwent a radical change after the Cold War, even if its structure did not. It can be seen to have developed in four phases.

In the first phase, intelligence became both acceptable and expected by deploying commanders. Within five years of the end of the Cold War battalion commanders had come to expect the augmentation of their peace time intelligence sections for their deployments. Later, when deployments below battalion size began to occur, smaller intelligence sections would be deployed to support independent companies.

In the second phase, the emerging information technologies of the 1990s began to make themselves felt and intelligence connectivity began to stretch forwards from Ottawa as classified information technologies were fielded. This allowed the extension of the same classified systems available to strategic intelligence analysts forwards. Starting with the CANIC in 1996 Canadian commanders had access to the same strategic intelligence products as their Ottawa counterparts.

In the third phase, improving information technology allowed the extension of strategic collectors forwards, resulting in the formation of the ASIC in Kabul. This was different from the second phase in that instead of merely sharing the same information between levels, strategic collectors could be tasked in support of tactical tasks and strategic and tactical analysts could collaborate to produce products.

The fourth phase, ongoing now, is more focused on changes to the intelligence target and the intelligence user than on changes in information technology. The move to

Kandahar has led to a struggle against a determined enemy within a counter-insurgency theme, at a level not previously experienced by Canadians. At the same time the intelligence user has split into two camps based on the construct in Kandahar province. In the first camp, commanders at levels down to company are placing an increasing emphasis on the provision of current intelligence to support their engagements with the enemy while in the second camp, TFK now requires operational intelligence to allow it to plan and sequence those battles and engagements. However, both of these camps seem to be unhappy with the ability of Army intelligence to provide the knowledge needed to fuel the counter-insurgency fight.

In light of the Second World War comments in the Final Intelligence Report, it is interesting to consider why Canadian commanders were now looking for knowledge and foreknowledge vice merely information regarding the adversaries current activities.[168] The reason maybe two fold.

First, when faced with a symmetric adversary the constraints of the operational setting will roughly parallel both sides. Given the experience, and one could add ability, of commanders who are two to three rank levels, with the attendant education and maturity of judgment, above their intelligence officers it could be expected that they would be generally better placed to do conduct the estimative aspects of the intelligence function. However, against an asymmetric adversary this experience edge is not as easily maintained, and the commander faces much greater uncertainty. This could lead to a much greater demand on the intelligence staff to conduct the estimative aspects of intelligence.

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[168]   *First Canadian Army Final Intelligence Report,* 3.

Second, the cost of this uncertainty has risen, or is perceived to have. The loss of Canadian soldiers is not something that commanders take lightly and the value of intelligence is probably not seen through the same lens on a peace support mission as it is on a counter-insurgency. This change in value, or emphasis, could result in intelligence support which previously was thought of as good enough to now be considered as failing to meet the mark due to changed expectations.

THE FUTURE – CONCEPTS AND ORGANIZATIONS

"The Intelligence organization within the Army must be flexible"

1ˢᵗ Canadian Army Final Intelligence Report, 1945[169]

Introduction

The Canadian Army is in the process of moving forwards to a "Force 2011" structure, and a restructure of Army Intelligence forms a part of this.[170] New brigade, battle group and reconnaissance squadron intelligence organizations are being created and will be manned over the next five years. The shortfalls noted in the first phase of post-Cold War intelligence employment are being dealt with through the establishment of ten man battalion intelligence sections, consisting of seven intelligence personnel and three combat intelligence trained personnel. The technology lessons of phases two and three are leading to the fielding of special intelligence communications facilities by the Army, promising easier integration with CDI national collectors.[171] Other phase three organization issues are being addressed by the formation of three Brigade Intelligence Platoons, to provide the core command and analytical functions of the ASIC. When complete, this Canadian plan will have increased the intelligence numbers available to the field force almost three fold to some 120 personnel. These manpower increases are similar to ones started four years ago in the American Army where battalion intelligence sections are doubling from five to ten personnel and brigade staffs are tripling in size, to

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[169]   *First Canadian Army Final Intelligence Report*, 10.

[170]   Canada. Department of National Defence. 3350-1 (COS Land Ops) "Guidance For Army Intelligence 2008" 13 March 2008.

[171]   Major Bedard, Acting Army G2, presentation to Land Force Development Working Group "Army Intelligence" 3 April 2008.

seventeen personnel, not counting their routine augmentation by a Military Intelligence Company's Analysis and Integration platoon on operations.[172]

Is this however the structure that will best support the Army in land operations in the 21st century? While the experiences since the end of the Cold War have shaped this development, is the future likely to present additional challenges or continue to develop the ones already experienced? Also, are there concepts arising from the basic examination of the nature of intelligence which would drive alternative organizational concepts vice a reinforcement of recent experiences? This chapter will first consider the future operational environment, and then propose changes to intelligence concepts and organizations for the land force.

The Future Operational Environment

The last two decades have seen the Canadian Army prepare for major combat while engaging in first peace support, and then counter-insurgency operations. What is likely for the future? The challenge lies in balancing likelihood against impact. Previously the Canadian Army chose the path of stressing the primacy of maintaining combat capability, while engaging in other operations across the spectrum. The "three block war" construct of thinking reinforced this, as it discusses combat, peace support and humanitarian actions as existing concurrently, but is used to stress the need to remain "combat capable".[173]

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[172]   Micheal Brake, "Brigade Combat Team Intelligence Operations" *The Military Professional Bulletin* Vol. 30. No. 4. (October-December 2004), 27-28. Major Bill Benson and Captain Sean Nowlan "Tactical Intelligence Shortcomings in Iraq: Restructuirng Battalion Intelligence to Win" *The Military Professional Bulletin* Vol. 30. No. 4. (October-December 2004), 8-15.

[173]   Department of National Defence. *The Interim Army: A Force Employment Discussion Paper* (Ottawa: DND, 2 September 2003), B-4.

Academic discussion is similarly mixed for this reason. On one hand Colin Grey points out there remains the reality that the relationship of war to politics, and the realities and advantages of the employment of force as a strategic choice will not go away. Miscalculation will be as much a factor in setting the conditions for inter-state war in the future as it was in the past. The experiences of the past two decades do not cancel out previous human history, and are not an immutable proof that "big war" is dead in favour of "little war".[174] On the other hand Martin van Crevald declares that the age of "big war" died on 6 August 1945 and that the Cold War was its death rattle. He argues that technology has made the cost of "big war" unwinnable, or has created situations where the outcome is so one sided in favour of the stronger so as to force the weaker to consider other methods of conflict.[175]

Within the Canadian Army the balance of thought is tipping. This maybe in part due to the fact that the Army finds itself further to the right on the spectrum of conflict and is now debating the type of adversary it will face and not whether there will be one. While draft doctrine still attempts to juggle all of the balls a la Grey, the Army's future concept paper leans more to van Crevald, including a statement by the Army Commander that: "increasingly, the likelihood of large force-on-force exchanges will be eclipsed by irregular warfare…".[176]

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[174]   Colin S. Grey, *Another Bloody Century* (London: Orion Books Ltd. 2005), 382-388.

[175]   Martin van Crevald, *The Changing Face of War* (New York: Presido Press, 2006), 264-260.

[176]   See both DND, Land Operations, 2-1 to 2-23 and Canada. Department of National Defence. B-GL-310-001/AG-001, Land Operations 2021: Adaptive Dispersed Operations - The Force Employment Concept for the Army of Tomorrow, (Ottawa: DND, 2007), 2.

The Army is also dealing with increased complexity in how it views the Spectrum of Conflict by advancing the idea that there will be a mixture of tactical operations, whose proportions will vary by campaign theme. These offensive operations, defensive operations, stability operations and enabling operations break down into a variety of tactical activities and tasks. Each theme is also characterized by differing aspects, among them the character of combat and the type of threat. One additional factor which could be added to this is the duration of a particular theme, based on previous experiences.[177] The table below shows these differences.

Table 5 - Predominant Combat Themes by Selected Criteria

	Peacetime Military Engagement	Peace Support	Counter-Insurgency	Major Combat	Limited Intervention
Prevalence of Combat	No Combat Foreseen	Localized, infrequent, discrete incidents	Localized, intermittent	Widespread, continuous	Plan may involve or avoid combat
Scale of Combat	Self Defence	Section and Platoon	Section, platoon and company	Battalion and higher echelons	Depends on plan
Intensity of Combat	No Combat Foreseen	Low; occasionally high	Med/Low. Long duration; occasionally high	High	Potentially high; short duration
Type of Threat	None	Formed Units and/or irregulars	Irregulars	Formed Units	Formed Units and/or irregulars
Duration	Short	Med-Long	Long	Short	Short

Source: Table from DND, Land Operations, 3-15 with the addition of a duration row.

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[177]   The Australian Army uses scale, intensity and duration to categorize conflicts. The duration concept is probably one that would be of use in considering Canada's Campaign themes. Australia, Australian Army, *Fundamentals of Land Warfare* (Canberra: Doctrine, Australian Army, 2005), Chapter 2. http://www.defence.gov.au/ARMY/LWD1/LWD1sitemap.htm; Internet: accessed 20 April 2008.

Of note, the scale of combat in a counterinsurgency is lower than it is in a major combat. In keeping with Canadian observations from Afghanistan, the subunit, or company, usurps the unit, or battalion. At the same time combat is less frequent, more localized and spread out over a longer duration. Accompanying this is a change in the adversary, from irregular to conventional.

Does the lowering of the scale of combat result in a corresponding change in where the operational level of war begins? Does the lower boundary between tactics and the operational art also move downwards? Does this force the Canadian Army to question whether or not it only has to consider tactical, vice operational, intelligence?

Canadian doctrine allows that the operational level is not linked to a specific level of command, and indicates that a division, brigade or battalion commander could operate at the operational level dependent upon the campaign and situation.[178] This is similar to American doctrine, which provides the example of a brigade commander in Iraq executing the operational art.[179] One approach would be to look for the boundary layer between the two. The tactical level fights battles and engagements or engages in activities, while the bottom portion of the operational level focuses on the major operation, within which battles or activities are sequenced.[180] This might suggest that the operational level would move downwards in a counter-insurgency.

Another approach is the American idea that changes in the complexity and scope of the problem serve to set the conditions for the move from operational to tactical

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[178]   DND, *Land Operations*, 3-4.

[179]   United States. Headquarters of the Army, TRADOC Pam 525-5-500, *Commanders Appreciation and Campaign Design* (Washington DC U.S. Government Printing Office, 28 January 2008), 8-17.

[180]   US, FM 3-0 *Operations* (2008), 6-1 to 6-19.

problem solving approaches. If the problem is well structured, for instance conducting a task within the context of the situation paragraph of an operations order, then it is a tactical activity. If however it is an ill-structured or un-structured problem, then there is an increasing likelihood that it is a problem at the operational level.

Other conditions that increase complexity are the issues of time and space. The Canadian experiences is that the area of operations have expanded dramatically over the Cold War model. While the intricacies of managing a given level of command in itself may not have increased, this expanded area of operations has brought with it significant social complexity. Unless merely conducting set tasks within that area, for example the conduct of presence patrols between former belligerents, it is likely that commanders will be forced into the operational vice tactical level at a lower level than before.

A major shift in Canadian doctrine is the acknowledgement that the boundaries between military and non-military actions have broken down, and there is an increasing awareness that military force alone is not capable of conducting the type of operations required to prevail. The Canadian Army is advancing a concept of a Joint, Interagency, Multinational and Public (JIMP) framework which will see the Army working with not only other militaries, but also other government departments (OGDs) and international organizations (IOs) or non-governmental organizations (NGOs) in pursuit of a comprehensive approach to operations. The Army is also acknowledging SOF as a partner in the Army's JIMP framework.[181]

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[181]   SOF are considered on page 5-15 within the entire JIMP framework which is found at *Land Operations*, 5-14 to 5-20. References to the need for cooperation and the ability to interface with SOF are made in . B-GL-310-001/AG-001*, Land Operations 2021: Adaptive Dispersed Operations - The Force Employment Concept for the Army of Tomorrow* (Ottawa: DND, 2007), 26 and 31.

One other factor likely to continue to play a role in the future will be increasingly mature information technologies. In this the American Army is taking the lead as the relationship between intelligence and information technology is being shaped by the demands of Iraq and Afghanistan to provide even greater access to intelligence collection systems and databases. As a result, the 'Distributed Common Ground System – Army' (DCGS-A) is being distributed down to battalion as well as to units in the United States to create a "flat" intelligence network.[182] DCGS-A provides geomatics and collaboration tools, allows access to over 200 databases, and eventually will include feeds from all intelligence collectors. Teaming of intelligence analysts recently returned from tour with those on tour through DCGS-A will allow for increased sharing of *tacit* knowledge. Implementing this sort of intelligence connectivity within the Canadian Army would allow all analysts access to the intelligence required to support their activities, and may not require a special organization to house national collector communications. This flattening of intelligence distribution and availability might be the part that technology plays in defining the fifth phase of intelligence development post-Cold War.

Discussion - Future Intelligence Concepts

Before moving on to discuss the organization of intelligence, it would be worth revisiting the concepts of intelligence. In light of the previous conceptual exploration, the Canadian Army's post Cold War experience and the likely future, what concepts should be shaping intelligence to enable land operations?

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[182]   Institute of Land Warfare, Association of the United States Army. *Key Issues Relevant to Actionable Intelligence - Torchbearer National Security Report* (June 2005), 11-12. Institute of Land Warfare, Association of the United States Army. *Key Issues Relevant to Army Intelligence Transformation - Torchbearer National Security Report* (July 2007), 7-8. available from http://www.ausa.org/webpub/DeptILW.nsf/byid/KCAT-6CXKU9; Internet accessed 19 April 2008.

First, the Army should adopt the concept that intelligence is knowledge, and not a specialized form of information. The consistent criticism that Intelligence staffs were not able to function properly until very late in their operational tours in both Bosnia and Afghanistan suggests that they became more effective as they became more familiar with the theatre.[183] This does not suggest an information management problem, but rather the normal development of *tacit* knowledge as seem by Waltz. As already noted, the American Army has seized upon this concept to drive their Project Foundary, where intelligence analysts preparing for deployments to Iraq and Afghanistan spend up to a year before hand working with national collectors to "read-in" to the theatre.[184] In a similar vein, the Americans are also making use of information technology to ensure that intelligence analysts recently returned from active theatres are available for collaborative work, and can participate in "tactical overwatch" from the continental United States.[185]

Most Canadian missions have been for more than one year, and were generally of sufficient length so that intelligence expertise could be rotated back into theatre if properly managed. The implication of this is that the Canadian Army must manage the development and maintenance of the intelligence analysts assigned to a given theatre of operations, throughout the time that the Army is participating in that theatre. However,

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[183]   Lisa Elliott discusses the effects of "six month-it is" in Bosnia on intelligence analysis and collection in her thesis on Canadian HUMINT. Lisa Elliott, "Finding a Balance…", 89-98. The same issue was raised in the Army's After Action Review 2006/2007 on operations in Afghanistan citing that "Analysts require a long period of time to become familiar enough with the specific intelligence problem to become effective." Earlier in the report the minimum time period in theatre before intelligence personnel became effective was stated as upwards of three months. Staggered rotations, or the shadowing of operational collectors for a month in Canada were suggested as possible solutions. *AfterAction Review 2006/2007*, 4 and 12 The US COIN doctrine manual suggests that the most productive analysts have more than a year focussed on an aspect of insurgency problems. *FM 3-24/MCWP 3-33.5 COIN*, 3-32 to 3-33

[184]   AUSA, Key Issues Relevant to Army Intelligence Transformation…, 11-12.

[185]   AUSA, Key Issues Relevant to Actionable Intelligence…, 9-10.

given the relationship between CDI, CEFCOM, SOF and the Army in providing

intelligence, it is likely that this aspect of knowledge management would benefit from

some degree of centralized control which may have to originate from outside of the Army

itself.

Second, there is a requirement that all intelligence activities occur upon a

foundation of basic intelligence that represents not only the *tacit* aspect of knowledge, but

also the *explicit* aspect of it. Basic intelligence, while generally not thought of as often as

the other types, is actually the bed rock of the intelligence business.[186] Without a sound

basis to build inferences from, current intelligence becomes a lack lustre reporting of the

days events and estimative intelligence becomes a poorly understood guess. A point that

needs to be understood about basic intelligence is that it is created and maintained in real

time, and maintained over time. It is not merely archived or old current intelligence;

rather it can be as dynamic as running organization chart, or order of battle, of insurgents.

The fact that the consumer does not usually see basic intelligence, tends to lead to

to it getting very little attention.   During the Cold War the Canadian Army used

American and British basic intelligence products to support training, and developing its

own was by exception rather than the rule.[187] While within the United States

organizations such as the National Ground Intelligence Centre (NGIC) still work to

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[186]   Douglas H Dearth and Thomas R Gooden, *Strategic Intelligence: Theory and Application,* 2nd edition (Carlisle Barracks: United States Army War College, 1995), 54.

[187]   An example of this was the unclassified FM 100-2 series on the Soviet Army used in training by the Canadian Forces during the Cold War. See United States. Department of the Army. FM 100-2-1 *The Soviet Army – Operations and Tactics.* Washington DC. 16 July 1984. United States. Department of the Army. FM 100-2-2 *The Soviet Army – Specialized Warfare and Rear Area Suppor.t* Washington DC. 16 July 1984. United States. Department of the Army. FM 100-2-1 *The Soviet Army – Troops, Organization and Equipment.* Washington DC. 16 July 1984. Previous to this the British *Notes on the Soviet Ground Forces* had been used, see United Kingdom. Ministry of Defence. Army code no. 70735. *Notes on the Soviet Ground Forces,* 1979.

provide the intelligence databases required to support land operations Canada has no such

tactically or operationally oriented basic intelligence producer.[188]   What basic

intelligence is produced to support force generation is done in an ad hoc manner by

intelligence staffs struggling to learn the operating environment. The country handbook

on Afghanistan, produced jointly by the Toronto and Montreal area intelligence sections,

and subsequently copied by succeeding rotations, is an example of this approach.[189]

The implication of this is that the Army must ensure that there is a process to

develop and maintain the basic intelligence over the years that characterize the typical

Canadian mission within a given theatre, and an organization responsible for basic

intelligence production on tactical and operational matters.

Third, the issues of knowledge and basic intelligence necessitate that the Army

frame its intelligence concepts across the Spectrum of Conflict, from garrison to

deployment to ensure that intelligence meets the needs of both Force Generation and

Force Employment. The implication of acknowledging this the need for intelligence to

support tactical training, is the follow on question of delineating responsibility for the

activity. Taking this one step further, what happens when there is the need to support the

force generation of a new mission? How does the Army lean forwards to develop the

basic intelligence on areas it is about to go to? How far forwards can it lean, given the

work required to produce basic intelligence?

Fourth, land operations require strategic, operational and tactical intelligence to be

effective and that the last two, operational and tactical, are likely to be produced in

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[188]   Jeffery Richelson, *The U.S. Intelligence Community* (Boulder, CO: Westview Press, 2008), 92.

[189]   Captain Cody Sherman. Briefing "3 RCR Battalion Group Intelligence Officer" dated 10 May 2004.

theatre as commanders who increasingly find themselves pushed into the operational realm by complex problems. If commanders are using the operational art to sequence tactical activities across expanded time and space, this creates a new set of intelligence demands.

The key differences between the tactical and operational levels from an intelligence perspective are increased complexity and increased time horizons, coupled with a shift in intelligence emphasis. The complexity of the problem space makes determining the boundaries of the problem much more difficult, and even intelligence can remain focused solely on one adversary, a wider variety of issues must be understood to provide useful intelligence. The increase in the time horizon, how far an operational commander must look out, will change the intelligence needs of the commander from understanding and reacting to the events of today and into exploring the uncertainty of tomorrow. In major combat this time span is increases from hour and days at the tactical level to weeks and months at the operational level, potentially longer still in a counter-insurgency.[190] Finally, the intelligence emphasis shifts from a concentration on the location of elements at the tactical level to capabilities and accompanying intentions at the operational level.[191]

Fifth, the need for operational intelligence will in turn drive the need for estimative intelligence. The increasing uncertainty of the operational realm will push operational intelligence staffs into that *speculative-evaluative* realm recognized by

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[190]   Dr Vego provides a discussion of the differences between strategic, operational and tactical intelligence. He highlights increased time and space, as well as the need to address unquantifiable factors from the moral plane as being major differentiators between operational and tactical intelligence. Dr Milan Vego, *Operational Warfare* (Newport, R.I.: Naval War College, 2000), 203-220.

[191]   US, JP-2 *Joint Intelligence,* I-21 to I-23.

Sherman Kent as a key part of Strategic Intelligence Theory. Operational commanders will rely more on *estimative* intelligence over *current* intelligence to meet their needs and operational intelligence staffs will demand more *textual* intelligence than *observation-measurement* intelligence to answer their commanders shift in focus to capabilities and intentions over location. This last shift to emphasis *textual* over *observation-measurement* intelligence will pose challenges to the tactical focused Army ISTAR and sense initiatives. As Herman pointed out, the basic assumptions of ISTAR lead it to supporting tactical operations against a defined opponent. The problem will be in ensuring that an ISTAR supported tactical activity is conducted within an intelligence supported operational framework to be relevant.

The need for *estimative* intelligence can not be met by stretching the Army's IPB process to the operational level as it was developed to provide a short term estimative process against a symmetrical adversary whose practises could be judged against a well developed warehouse of basic intelligence products.[192] It supported the engineering of a solution to a reasonably structured problem; it was not developed to support the design of a campaign to address an ill structured one. Bounded within this structured problem, it was constructed as a process that could be replicated by intelligence personnel as a general approach, irrelevant of location. In reality when faced with ill-structured problems these tactical intelligence personnel were not able to use the process, and had been provided with no other.[193] Instead it is likely that a more open estimate process is

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[192]   Lieutenant-Colonel Villeneuve, "Guessing What is on The Other Side of The Hill: A Review of Canada's Experience with IPB." (Toronto: Joint Command and Staff Course, 2005), 63-65.

[193]   *Ibid., 62.* Lieutenant-Colonel Villeneuve interviewed eleven intelligence officers who participated in Operations in Bosnia, Haiti, Kosovo, Ethiopia/Eritrea, East Timor and Afghanistan to conclude that IPB was not generally being used on deployments.

required, which in turn will drive the need for analysts in the mould of Sherman Kent's "intellectually competent human", with all of the accompanying difficulties in developing him or her to full potential, ensuring that they embody "that subtle form of knowledge which comes from well-stocked and well-ordered brain cells".[194]

The implication is that intelligence personnel must be trained, educated, developed and available to support both levels, and that collectors must be available to support the demands for both kinds of intelligence, dependent upon the theatre.

Sixth, current intelligence, while required at increasingly lower levels, will also need to be shared widely to synchronize tactical activities between levels of command. While current intelligence tends to be both the exciting and high profile aspect of intelligence, unfortunately it is also places heavy personnel demands if the goal is providing the 24/7 support.[195]   As noted in Afghanistan, there is an increasing need to perform intelligence activities at the company level, both to coordinate the activities of ISR assets in support of tactical activities and to support the bottom up nature of intelligence operations in a counter-insurgency.[196]

Finally, it is likely that the fifth phase currently emerging in how developing intelligence to support the Army will develop in the near future, one that will be strongly influenced by the Army's JIMP concepts. In the future, command constructs such as JTF-Afg are likely to include an even greater emphasis on integrating both SOF and other government departments into land operations. There needs to be the ability to integrate

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[194]   Kent, *Strategic Intelligence…*, xxi and 64-65.

[195]   Dearth and Gooden, *Strategic Intelligence: Theory...* , 52-54.

[196]   Lieutenant-Colonel Villeneuve, "To Provide Focus: Intelligence and Counter-Insurgency", *Canadian Army Journal,* Vol. 10.4 (Winter 2008), 65-67.

Army Intelligence deployers with non-Army intelligence deployers, during force generation and throughout the deployment. The Army's current and "Force 2011" intelligence structures do not position it well to do this. In fact, the decentralization of intelligence within the Army encourages another CF organization to step forwards and take responsibility for coordinating the intelligence aspects of JIMP. Likely candidates for this role are CDI or CEFCOM.

The intelligence aspects of JIMP can also be linked back into the Army's understanding of its roles and responsibilities regarding basic intelligence. If the basic intelligence task is accepted for Army Intelligence, then the JIMP framework would suggest a possibility for developing both in-theatre and out of theatre *explicit* and *tacit* knowledge in concert with the Army's intelligence partners. By providing a focal point for basic intelligence production the Army could ensure that all partners were operating from the same level of in theatre understanding.[197]

As one example, should both Canadian Army and Canadian SOF elements be operating in the same area of operations then there is the need for interoperable intelligence architectures regardless of the use of operational control measures to separate the two. Working in a land environment against a common adversary creates the need to share basic intelligence in both directions. The principle of central coordination governs the need to ensure that basic intelligence is not being developed separately and refined for tactical activities by both Army and SOF intelligence elements. In considering *tacit* knowledge development, there is value in developing experts capable of serving both

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[197] The need to integrate civilian and security intelligence personnel into ASIC structures has been identified as a crucial long term objective for the development of the ASIC. Remillard, "The "All Source" Way…," 25.

Army and SOF deployments within a given area, as opposed to stovepiping their employment.

Discussion - Organizing Intelligence for the Future

How should the Canadian Army think about organizing its intelligence from the seven conceptual thoughts discussed? As mentioned in the second chapter on intelligence, prior common usage appears to have intelligence supporting situational awareness and target development, with force protection frequently appended to that. Any more detailed examination based on intelligence functions such as IPB and BDA risks concentrating of the requirement to perform certain tasks vice providing a given capability.

Assuming that the Canadian Army will operate at the operational level and tactical level in the future, and that it wishes take some degree of responsibility for the generating of basic intelligence to support land operations, then one possible restated set of tasks for Army Intelligence would be to:

a.   provide the basic intelligence required to support the planning and conduct of operations, tactical activities and force generation;

b.   provide the operational intelligence required to plan and conduct operations; and

c.   provide the tactical intelligence required to plan and conduct tactical activities (to include all aspects, kinetic and non-kinetic).

To deliver these tasks requires an understanding that there is a connection between the Army and the theatre in which it operates. There are two aspects to this connection, the need to both provide basic intelligence for force generation, and the need

to provide the *tacit* knowledge expertise required for both basic intelligence production and the conduct of *estimative* intelligence. Army Intelligence is connected not only to the force being deployed, it is also connected to the theatre and the adversary. While the former connection is supported by the Army's intelligence vision for "Force 2011", the later connection is not.

Building on these tasks, the following framework integrates the concepts and tasks to look at how the Army's intelligence organization should be constructed (see Figure 6). In keeping with the conceptual discussion, the organization must be able to provide both operational and tactical intelligence (the two rows) across the three activities of force employment, force generation and theatre preparation (the three columns). Within that frame it must be able to provide: the basic intelligence required for all activities and at both levels; the estimative intelligence required to frame tactical activities during force employment; and the current intelligence required to conduct tactical activities during force employment. The layering of the three layers represents the challenges in addressing the complexities of the Army's JIMP framework and providing for integration with SOF and other government departments (OGDs)
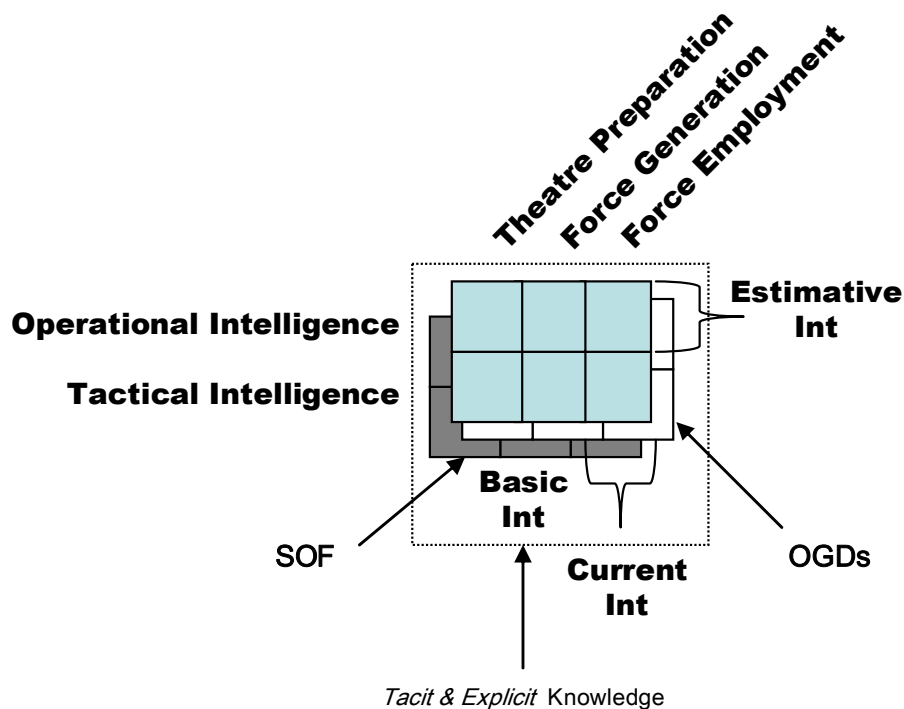
intelligence activities.

Figure 6 - Proposed Army Intelligence Conceptual Framework

While the intelligence structure for "Force 2011" does address a variety of lessons from the post-Cold War experience, it maintains the Cold War legacy of dispersing the garrison intelligence architecture throughout the brigades, the areas and the reserves, albeit with greater numbers. The intent of providing centralized pools from which to draw intelligence capabilities that had been envisioned previously in Army 2002 and the 1996 Master Development plan has been abandoned. These centralized pools would have given the Army a starting point for developing basic intelligence, *tacit* knowledge expertise and operational intelligence support. Instead the intelligence structure for "Force 2011" emphasizes the delivery of current intelligence at the tactical level during

force employment. Its portion of the framework would be represented as shown in Figure 7.
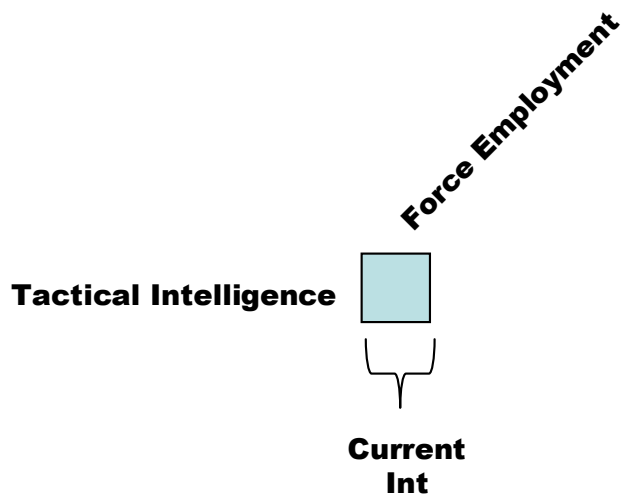
Force Employment

Tactical Intelligence

Current Int

Figure 7 - Current Army Intelligence Conceptual Framework

There is of course an organizational alternative to the above, and that is to make the basic assumption that all that Army Intelligence will do is support tactical activities and that the remainder of the tasks will be met elsewhere within the CF. While they have not been met to date, it is within the realm of the possible to assume that providing *tacit* knowledge expertise, basic intelligence and operational intelligence practioners for land operations could be done by someone else. While CDI is one possibility, the tensions in balancing the provision of strategic intelligence, providing intelligence national collectors at home and abroad, as well as providing operational and tactical basic intelligence and force generating theatre *tacit* knowledge experts may not always have the best results for

those deployed. CEFCOM is another alternative, requiring it to develop a joint

intelligence capability to support operations world wide and taking the lead in setting the

intelligence standards for SOF and the Army upon deployment.

Moving from the problems of garrison, to focus a bit more of those on

deployment, the Army's new intelligence organization is based on the assumption than

the current force employment concepts for intelligence work.[198] Given some of the

problems noted in Afghanistan it may be worth questioning this assumption. As

described in the last chapter, it is generating an architecture that developed over five

years, in two locations (Kabul and Kandahar province), served three differing force levels

(battalion, reconnaissance squadron and TFK) within a campaign that arguably

transitioned from peace support to counter-insurgency as its main theme. Given the

observations regarding intelligence support expressed by some combat leaders in the last

chapter the question must be asked, is this the intelligence structure which the Army

wishes to perpetuate?

There needs to be a word of caution regarding the enthusiastic disassembly of the

current force employment concept. Given the issues with the garrison organization of

Army Intelligence, the challenge of developing knowledge on the theatre, and the ad hoc

nature of current Force Generation there exists the possibility that the problems

experienced may have their roots in Canada, vice in Afghanistan. However, it is hard to

judge how effective the current theatre structure would be if these other issues were

addressed. Given that the Army's current intelligence plan will take five years to

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[198]   The "Guidance for Army Intelligence - 2008" states that it "delivers a Force Generation structure that is more closely aligned with our current Force Employment Concept" and that future Force Generation will remain the same unless there are changes in the Afghanistan "Theatre Intelligence Architecture". DND, "Guidance for Army Intelligence -2008", 14 and 17.

implement, it is probably still worth considering the Force Employment Concept to see if there might be adjustments or improvements which could leverage the proposed Army Intelligence Conceptual Framework.

A key element of the Force Employment Concept is the ASIC as an intelligence unit. This is a continuation of the Corps '86 which had formation centric intelligence processing centres. However they were envisioned as a means of providing current intelligence to a symmetrical force, within a contiguous battlespace, facing off a reasonably similar adversary. The emphasis was on integrating the *measure-observation* intelligence from technical sensors, whether by hand or aided by information technology, to allow the entire elephant to be recognized, as opposed to only its constituent parts. This is not the norm in a counter-insurgency, and instead the complexity of the environment leads to a series of unrelated current intelligence problems occurring simultaneously, defying integration and understanding in real time. Furthermore, Canadian organizations are being employed in an asymmetric manner, where one element might be fighting (the battle group), another might be supporting reconstruction (the PRT), yet another might be supporting the training of local forces or engaging in a separate location (the OMLT) while at the same time SOF may be operating concurrently against high value.

The original Kabul ASIC was employed in long-term analysis and exploitation, and provided various national collectors which were kept under Canadian national vice NATO control. This can be seen to be a natural outgrowth of the CANIC development. Its development and growth over successive rotations may have been more a symptom of

how organizations grow, than a realistic appraisal of the intelligence needs of a theatre.[199]

The fundamental question is how intelligence processing should be organized, and its

relationship to the collection capabilities embodied in the ASIC. The centralization of

collection capabilities is not a bad thing in itself if it leads to the better employment of

scarce resources.

Looking from the bottom, the intelligence problem quickly becomes very

localized. The non-contiguous, non-linear nature of force employment in concert with

changes in the prevalence, scale and intensity of combat have resulted in engagements in

Kandahar province that are not the discreet direct actions of Kabul. Instead companies

remain deployed for weeks at a time, leading to the increasing intelligence demand at the

company and battalion level. Here, the Army's intelligence concept for "Force 2011" has

successfully addressed this issue.

The challenge is somewhat different when viewed from the top, TFK must not

only remain aware of the situation where its subordinates are, it must also understand

what is going on in those areas where they are not. In the first case, it needs to be able to

share current intelligence in both directions to ensure that sufficient synchronization to

support subordinates with higher level enablers including ISR or air support. In the

second case, it must not only maintain this awareness through collection and updating of

its basic intelligence, it must be able to when required develop the intelligence to the

level of detail required to support new tactical activities.

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[199]   The ASIC was described as a 20 man structure by Comd KMNB on its initial rotation, and the
ASIC organization depicted recently in the *Canadian Army Journal* has more than 50 personnel in it.
Devlin, "Canadian Soldiers Deploy…," 7 and Ohlke, "Army News…," 6.

It is the maintenance of a proper basic intelligence template across the commander's area of intelligence interest, upon which all current intelligence activities can be matched, and which integrates the requisite *textual* intelligence to allow estimative intelligence to be projected forwards, that is key to intelligence success. If however there is no faith in the analysis underlying this basic intelligence, then the entire intelligence system becomes fixated on the fleeting opportunities of current intelligence. The solution to fixing the basic intelligence challenge lies in Canada, where ownership of the processes for both the development of the *explicit* knowledge portion of basic intelligence can be standardized and the personnel management of the *tacit* knowledge piece of the puzzle can be orchestrated.

If this can be generated at the top, then the flexibility has to be inherent in the system to allow TFK to re-organize its analytical personnel to support any tactical activities that require additional support. Here is where there might be a benefit to examining the American DCGS-A experience, as a "flat network" where analysts can be delegated to support and provide "tactical overwatch" to tactical activities that they helped lay the basic intelligence ground work for might bridge the intelligence gap from the operational to tactical levels.

However, centralizing intelligence in the middle in a separate intelligence line unit, for an asymmetrical battle, does not appear to allow this flexibility without involving command and control re-arrangements for every tactical activity that is delegated. It is interesting to note the American experience with the Analysis and Integration Platoon, and its assignment to augment the Brigade G2 staff. It must also be remembered that TFK is not a multi-national headquarters, the key rationale of Kabul in

separating the analysis function from the headquarters to maintain a separate Canadian

vice multi-national intelligence chain is not at play. The question then that needs to be

asked in the Canadian context is whether the analytical portion of the ASIC might be

better employed integral to the TFK's J2 staff, or subordinated to it but remaining under

the ASIC for administration. This would then leave the ASIC to coordinate and

supervise collection activities.

Regardless of command and control solution, the problem in Afghanistan seems

to be the inverse of that seen in Canada. In the field, in a counter-insurgency,

centralization of analysis in the middle does not appear to provide the advantages of

pushing it to the top and the bottom in an effort to flatten the structure. In the absence of

a security requirement to segregate intelligence outside of a multi-national chain of

command the question may have to be asked why it is still then the practise.

CONCLUSION

"Intelligence thinking must be flexible."

- First Canadian Army Final Intelligence Report, June 1945[200]

The experiences of the post-Cold War Canadian Army have led it from Germany to Afghanistan, with intelligence trailing behind for most of the journey. Combat, whether a major conflict or a counter-insurgency, has the effect of focusing an Army on its adversary with a resulting emphasis on intelligence similar to that experienced in both World Wars.

But, as Davies point out "how we define what we think we are doing when we are doing intelligence shapes how we do intelligence."[201] If the definition is not clear, or its interpretation leads in directions other than that which is intended then the organization and practise of intelligence follows suit. The Canadian Army appears to have taken this route with its doctrine starting in the late 1990s, with an increasingly unclear framing of the Army's conceptual framework for intelligence. The adoption of concepts such as Information Operations (IO) and Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) played a major role in this, as did the larger struggle to come to terms with the information technology revolution.

While Canadian thought on intelligence had migrated from intelligence as a specific sort of information, to a more American concept of information as a specific component of intelligence, this process suffered some reversals under the information management approach to intelligence. The rise of *observation-measurement* kinds of

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[200]   *First Canadian Army Final Intelligence Report*, 9.

[201]   Davies, "Ideas of Intelligence…", 66.

sensors, coupled with information technology was seen as the answer to the dilemma of making intelligence actionable and facilitating the destruction of the enemy on the physical plane. The problems of adversarial intent, attitudes and morale, with its less easily portrayed *textual* intelligence were not addressed to the same extent.

As a result, the focus on knowledge was lost to a focus on information. When the term knowledge was used, it was seen in the context of the cognitive hierarchy, and not in the context of knowledge management. While the *explicit* form of knowledge was recognized implicitly, the *tacit* form or knowledge was not. Against the monolithic enemy of the Cold War, this was not that great of an issue as intelligence personnel could develop against that threat throughout their careers, as did commanders. Against a changing and asymmetrical threat environment, those same commanders appear to expect more.

The post-Cold War intelligence experience saw the growth of intelligence personnel on peace support missions, and an increasing interconnectivity between national and tactical intelligence levels. While previously intelligence had been a brigade and above discipline, it was being employed at lower and lower levels. The last few years have accelerated both this growth and this interconnectivity. It has also seen the introduction of the operational level headquarters on deployment, with the new intelligence requirement to support that level of command.

The last few years have also seen the Army venture into a struggle against a determined adversary in a counter-insurgency theme. This sort of theme is seen to be the likely future for the Canadian Army, with an emphasis on irregular warfare over large force-on-force exchanges. This will both drive intelligence demands even lower, from

battalion to the company level and emphasize the operational level at lower levels as well due to the need to frame complex problems. This increasing complexity will require the military to operate in a more integrated fashion with other militaries, SOF and other government departments within a JIMP framework to be effective. At the same time, information technology is continuing to provide the promise of increased connectivity throughout the battlespace, with the possibility of further flattening the intelligence networks.

While the post-Cold War experience shaped how Army Intelligence was employed, up until recently the Cold War shaped how it was organized. Even now, the Cold War de-emphasis on the Canadian production of tactical or operational level basic intelligence carries on, as the new organizations are structured to perform while deployed. There is not an intelligence system to support the generation of basic intelligence, nor the development and maintenance of *tacit* knowledge expertise. Nor is there an inherent ability to either support force generation activities with basic intelligence, or lean forwards to prepare basic intelligence at the tactical or operational level for likely future theatres. As well, there continues to be difficulties in integrating the intelligence aspects of JIMP in Canada as there is not a central rallying point for all of the intelligence components to come together.

If the Canadian Army does not look to its core Intelligence concepts, it is in danger of continuing this trend of portraying intelligence in an information management context. The expectation that arises from this is that if the pipes are built, from somewhere intelligence will flow. The in Canada structure of Army intelligence resembles that of pipe fitters, waiting to go to assemble this system. Unfortunately as can

be seen from the Afghanistan experience there needs to be some level of expertise within the pipes from the start, and the water pressure should actually be built up before hand and extended into theatre, not assembled there.

If the Canadian Army does not embrace intelligence as knowledge, and organize accordingly, it will continue to find itself wondering why the pressure in its intelligence pipeline is low. Without priming the pump with *tacit* knowledge and ensuring the accumulation and maintenance of a reservoir of basic intelligence the rattling sounds coming from Afghanistan are likely to continue, and re-emerge in the future.

To prevent this, the Canadian Army must look to further integrating with CDI, CEFCOM, SOFCOM and the OGDs to build a Canada to theatre knowledge based intelligence structure able to support theatre preparation, force generation, and force employment with the ability to provide basic, current and estimative intelligence at the tactical and operational levels. The first step in this is to reframe its concept of intelligence, in concert with these partners, to set the stage by ensuring that all are thinking about the same intelligence, before it finds that perhaps it is not getting what it wants, but it is getting what it has defined.

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