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REGULAR ARMIES AND LOW INTENSITY CONFLICT:

THE INTELLIGENCE DIMENSION

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ABSTRACT

The nature of conflict is steadily transforming in such a way that the predominant form of warfare is becoming low intensity conflict. In the past half century, this form of conflict has seen regular armies involved in scores of counter-insurgency and peace support operations. This trend is predicted to continue into the foreseeable future. Despite the distinctiveness of low intensity conflict from conventional operations, many armies have not developed unique doctrine to support low intensity operations. The intelligence dimension of low intensity conflict is one such area where conventional doctrine continues to be applied in support of non-conventional operations. This conventional approach disregards the unique intelligence requirements of a regular army involved in low intensity operations. As such, the current Intelligence, Surveillance, Target Acquisition, and Reconnaissance process does not adequately support intelligence operations in a low intensity conflict, as it is fixated on a technology reliant and conventional approach to intelligence collection. Examination of past and present low intensity conflicts in the form of counter-insurgencies and peace support operations will reveal that unique intelligence aspects in the form of human intelligence collection and the use of non-military sources of intelligence are required to adequately support intelligence operations.

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INTRODUCTION

The latter half of the 20th century marked a radical transformation of warfare in the modern world. In the main, this transformation was the result of a shift from conventional warfare to low intensity conflict. Numerous academics, historians, and military philosophers predict that future warfare will increasingly involve regular armies against non-conventional forces.[1] As well, the occurrence of conflicts involving non-conventional forces versus other non-conventional forces is increasing. In the latter case, regular armies are often called upon to stabilize a conflict. Regardless of the causes, regular armies will increasingly be used against non-conventional forces. This change will inevitably force armies to adapt new doctrine and relearn old lessons.

Conflicts pitching regular versus non-conventional forces are certainly not a recent or futuristic development in warfare. A cursory historical examination of the past three centuries reveals that all colonial empires conducted several campaigns using their regular armies against non-conventional forces in what the British once termed as imperial policing.[2] These largely counter-insurgency operations were conducted with varying degrees of success. Low intensity conflicts are the inevitable result of the weak against the strong. Liddel Hart captures the essence of why these types of operations will become increasingly more frequent: "The supreme art of the strategist is to convert his opponent's advantages to their disadvantage, while minimizing his own disadvantages."[3] A colossal gulf now exists between the conventional warfare capabilities of developed

[1] Marten Van Creveld, The Transformation of War (New York: The Free Press, 1991) p. 1.
[2] Sir Charles Gwynn. Imperial Policing (London: Macmillan and Co., 1939) pp. 3-5.
[3] Liddell Hart, T.E. Lawrence (London: Jonathan Cape, 1934) p. 440.

nations compared to that of the Third World. As such, these less developed countries have no option but to use low intensity conflict in order to pursue agendas if and when diplomatic means fail. Non-state sponsored or internationally recognized actors possess no other means but to engage in low intensity conflict.

Low intensity conflicts are referred to by a variety of terminology including counterinsurgency operations, asymmetric warfare, conflicts short of war, operations other than war, guerilla warfare, fourth-dimensional warfare, peoples' war, as well as peace support operations.[4] Whatever the label, this thesis examines specifically operations conducted by state-sponsored military forces against non-conventional forces. Non-conventional forces will be considered as forces that do not belong to an internationally recognized state military.

This thesis does not argue that warfare of the future will be characterized and indeed dominated by low-intensity conflict. However, history and current operations demonstrate adequately enough that modern militaries must be prepared to conduct low-intensity conflict operations. Some militaries are beginning to recognize this requirement to differing degrees. As such, new doctrine is emerging which specifically addresses low intensity conflicts. Within the CF, this doctrine is written under the title of Operations Other Than War (OOTW).

The last decade has seen the CF involved in no less than seven different low intensity operations abroad. In the main, these missions were peace support operations. They include OP CAVALIER (Croatia and Bosnia under UN mandate), OP DELIVERANCE (Somalia), OP PALLADIUM (Bosnia under NATO mandate), OP

[4] Claude Sturgill, Low-Intensity Conflict in American History (Westport CT: Praeger Publishing, 1993) pp. 2-3.

CONSTABLE (Haiti) OP KINETIC (Kosovo), OP TOUCAN (East Timor), and OP ECLIPSE (Ethiopia and Eritrea). A study of the post-operational reports from these operations and the author's personal experience reveals many shortfalls within CF OOTW doctrine. Of these deficiencies, military intelligence stands out as a consistent source of challenge and frustration.

Military intelligence and the challenge that it presents in the conduct of OOTW is a common theme throughout the literature written on low intensity conflict operations. In referring to insurgencies, Mockaitis claims: "Intelligence gathering is such a vital part of counter-insurgency."[5] Similar emphasis on the importance of intelligence operations is found in peace support operations literature as well. On the subject of peacekeeping, Kitson states: "establishing an effective intelligence organization is a matter of the first importance."[6] Despite this predominance placed on intelligence, and considering the countless number of low intensity conflicts, the lessons related to intelligence have not been well learned or transferred from previous operations.

Much of the available literature written on low intensity conflict deals with counter-insurgencies. Although the CF has been involved in counter-insurgency operations, most of the CF's exposure to OOTW has been in the realm of peace support operations.[7] In order to compare counter-insurgency operations against peace support operations, it is important to illustrate that counter-insurgency and peace support operations share many commonalities. Frank Kitson captures this connection best:

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[5] Thomas Mockaitis, British Counterinsurgency in the Post-Imperial Era (Westport CT: Praeger Publishers, 1999) p. 122.
[6] Frank Kitson, Bunch of Five (London: Faber and Faber Ltd., 1977) p. 287.
[7] Canadian forces participated in the North West Rebellion of 1885 and the Second Anglo-Boer War of 1899-1902.

> Although peace-keeping is a fundamentally different occupation to the countering of subversion, there is a surprising similarity in the outward forms of many of the techniques involved. On this account a certain amount of the preparation needed for fitting the army to carry out the latter task is also relevant to the former.[8]

The major similarity shared between counter-insurgency operations and peace support operations, is the aspect of regular armies dealing with irregular forces in an unconventional milieu. In conducting such operations, most successes have been realized by armies, which have approached these operations in a non-conventional manner. By this, a non-conventional approach refers to the development of an operational design that reflects the unique nature of low intensity operations and is doctrinally different from conventional warfighting operations. A non-conventional approach incorporates many non-military aspects such as the close cooperation of the military with civilian and police authorities. This non-conventional approach also applies to the processes used to collect information.

At present, conventional forces, for the most part rely on technology to collect information within what is commonly referred to as Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) operations. ISTAR is a supporting component within the combat function referred to as Information Operations (IO). Specifically, ISTAR is the process of information gathering in order to support a commander in the decision making process.[9] The current Revolution in Military Affairs (RMA) is arguably being fueled by the technologies of the information age.[10] Consequently, an even greater reliance on the use of technology to collect information is being conceptualized within

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[8] Frank Kitson, Low Intensity Operations (London: Faber and Faber, 1972) p. 144.
[9] Department of National Defence, Land Force Information Operations (Kingston: Directorate Army Doctrine, 1999) p. 61.
[10] Franklin Spinney, "What Revolution in Military Affairs" Defense Week April 23, 2001, p. 2. http://d-n-i.net/FCS_Folder/comments/c410.htm

the ISTAR framework for future armies.[11] Review, however, of literature and post operational reports from peace support and counter-insurgency operations often relate that a void exists in the intelligence collection ability of conventional forces, particularly in the area known as human intelligence.

What are the unique aspects of military intelligence in low intensity conflict and do these unique requirements mandate an approach distinct from conventional operations? The current ISTAR process is inadequate to support low intensity operations as it causes a fixation on a conventional approach. This fixation on a conventional approach causes ISTAR operations in low intensity conflicts to be deficient along three major themes: an over-reliance on technology, a disregard for human intelligence collection, and a discounting of non-military sources of intelligence. These themes are closely inter-related. An over-reliance on technology causes technologically based ISTAR assets to be used to collect information when technological means may not always be the most appropriate collection means. This dependence on technology often causes the human dimension of intelligence collection to be overlooked. When the human dimension is disregarded, the conventional approach ignores non-military sources of human intelligence collection and integration. There is a correlation between the success and failure of intelligence collection in low intensity conflicts along these themes reflected in past counter-insurgency operations, present-day peace support operations, and predictable for future fourth generation warfare.

[11] Jacques S Gansler "Building the Army After Next: Total Battlespace Dominance Through Total Battlespace Awareness," Association of the U.S. Army Winter Symposium and Exhibition February 17. 1998. www.acq.osd.mil/ousda/speech /ausa.html.

COUNTER-INSURGENCY OPERATIONS

The military intelligence themes of human intelligence collection, non-military intelligence sources, and over-reliance on technology first became apparent to regular forces during the conduct of counter-insurgency operations. Counter-insurgency operations are the oldest form of low intensity conflicts involving regular armies. According to Ellis, "Guerilla warfare is as old as man itself and there are countless documented examples of this kind of struggle throughout history."[12] In the 20th Century alone, more than 60 guerilla wars have been waged; yet conventional armies must continually re-learn lessons in counter-insurgency operations. The simplest explanation is that modern armies are structured and trained to operate in the worst possible scenario at the most intense extreme of the spectrum of conflict. As such armies are forced to adapt when assigned to low intensity conflicts.[13] This adaptation process also includes military intelligence collection. Often, an army's ability to quickly adapt and establish unique intelligence collection methods is a significant contributing factor in the outcome of the conflict.

The outcome of a campaign should be determined by the campaign's operational design. In turn, intelligence collection is driven by operational design. Operational design refers to the selection of key factors which when attacked or neutralized will result in the defeat of the enemy's centre of gravity. The enemy's centre of gravity is a characteristic, capability or locality from which the enemy derives his strength, freedom of action and

[12] John Ellis, From the Barrel of a Gun: A History of Guerrilla, Revolutionary and Counter-Insurgency Warfare from the Romans to Present (London: Greenhill Books, 1995) p. 11.
[13] General Wesley Clark, Waging Modern War (New York: Public Affairs, 2001) pp. 458-460.

his will to fight.[14] A centre of gravity is linked to intelligence collection in that it determines an operation's Priority Intelligence Requirements (PIRs). PIRs answer questions that a commander needs to know about the enemy.[15] What a commander needs to know about the enemy therefore is driven by what is believed to be the enemy's centre of gravity.

Consideration of centres of gravity of counter-insurgency operations highlights the critical role of intelligence. At the strategic level, Mao emphasizes the political nature of guerilla warfare as being the "life of both guerilla armies and of revolutionary warfare."[16] This would indicate that at the strategic level, the centre of gravity is non-military in nature. At the operational level, Mao claims: "intelligence is the decisive factor in planning guerrilla operations…and as a corollary, guerrillas deny all information of themselves to their enemy, who is enveloped in an impenetrable fog."[17] The elusive and clandestine nature of guerilla operations is further emphasized in the Maoist axiom that "guerillas had to be fish swimming in a sea of people."[18] Based on Mao's dictums, intelligence operations are essential in order to allow regular armies to be able to identify guerilla fighters from the general population. It could be further argued that the guerillas' ability to conceal themselves within the general society is their centre of gravity.

The centre of gravity of a guerilla force is considerably different than the enemy centre of gravity in conventional operations. In conventional operations, the centre of gravity is usually determined as the enemy's forces, offensive capability, or ability to

[14] Department of National Defence, Conduct of Land Operations (Kingston: Directorate of Army Training, 1998) p.38
[15] Department of National Defence, Land Force Command (Kingston: Directorate of Army Doctrine, 1996) p. 3A-2.
[16] Mao Tse-Tung, Mao Tse-Tung on Guerrilla Warfare, trans. Samuel B. Griffith (New York: Frederick A. Praeger, 1961) p. 88.
[17] Ibid p. 23.
[18] Ellis, p. 267.

dominate a locality. The unique nature of the centre of gravity of a non-conventional enemy lends support to the argument that intelligence collection methods also need to be distinct from a conventional approach.

The approach taken to intelligence collection is often greatly influenced by the strategic level operational design. In counter-insurgency operations where the focus was on the destruction of the insurgent's military force, intelligence operations for the most part were conducted in accordance with conventional operations. In most cases, this conventional military approach was met with failure or at best, limited success. In counter-insurgency campaigns where the unique nature of low intensity conflict was recognized, intelligence collection correspondingly reflected this distinctiveness. The British experience in Malaya and Palestine provides good historical examples of counter-insurgency operations where the approach did and did not take into account the unique aspects of intelligence collection in low intensity conflict.

THE BRITISH EXPERIENCE

The British, as many other colonial powers, have a long historical involvement in low intensity conflicts. The British historically recognize the value of creating insurgency and do not hold it exclusive of conventional war. It was the strategy of the British to conduct irregular warfare in the Middle East during World War I in order to defeat the Turks.[19] Despite Great Britain's long history in conducting counter-insurgencies and a number of successful campaigns, she continued to experience occasional failures up to 1948. Specifically, the last notable failure occurred in Palestine. After this period, however, and perhaps because of lessons learned in Palestine, Great Britain began to experience a number of successful counter-insurgency campaigns commencing with

[19] T.E. Lawrence, Seven Pillars Of Wisdom (London: Jonathon Cape, 1952). pp.26-66.

Malaya in 1948. Palestine and Malaya, therefore, are good models to demonstrate the contribution of the unsuccessful and successful applications respectively, of intelligence operations in counter-insurgencies.

Palestine

Counter-insurgency operations in Palestine were largely unsuccessful. The Jewish insurgency in Palestine occurred from 1943 to 1948 during which time it was a British Mandate.[20] Palestine is an apt place to commence a review of British Army intelligence practices in counter-insurgency operations, as it was the first of many operations to be conducted in the post World War II era. Further, the importance of Palestine to intelligence operations during counter-insurgency operations lies in the lessons learned from the intelligence collection failures. Specifically, Palestine illustrated that intelligence collection must be conducted in a unique non-conventional approach.

The British in Palestine took a conventional approach to intelligence collection. In terms of intelligence threat assessment, no definition or explanation of the various Jewish underground groups was provided. Rather tactical guidance was reissued based on contingency operations dealing with expected German guerrilla resistance following the occupation of Germany.[21] This approach suggests a conventional mindset where an enemy can be templated and one model fits all. It disregards the unique intelligence collection aspects that each counter-insurgency operation necessitates, especially the requirements for human intelligence and non-military sources of intelligence collection.

[20] Ellis, p. 260.
[21] David Charters and Maurice Tugwell, Armies in Low-Intensity Conflict: A Comparative Analysis (Toronto: Brassey's Defence Publishers, 1989) p.191.

The Army's disregard for unique intelligence collection methods was partially the result of its mandate. Military, civil, and police cooperation was considered important but the military was given the role "to keep the peace" rather than dealing with the insurgent organizations.[22] Furthermore, in Palestine, intelligence was considered to be the purview of the police rather than a joint military-police function. This jurisdictional control of intelligence suited the Army because a general feeling prevailed that there was no reason that "there should be an Intelligence Corps at all."[23] Therefore, the focus of the Army was along the lines of security operations rather than intelligence. However, the Palestine Police were not able to conduct effective intelligence operations and the task defaulted to the Army.[24] Consequently, the Army assumed an intelligence collection task for which it was not adequately prepared or motivated to execute.

The Army's execution of intelligence collection in Palestine, largely owing to its fixation on a conventional approach, was at best ad hoc. Much of the intelligence effort was directed at keeping forces situationally aware of the operational climate rather than concentrating on the provision of exploitable operational intelligence.[25] In this regard again, the result was that Army largely ignored the themes of human intelligence collection as well as using non-military sources of intelligence such as the civilian police.

Despite some doctrine that stressed joint police-military intelligence cooperation and common intelligence courses for both police and military personnel, military-police

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[22] Ibid p. 194.
[23] Jock Haswell, British Military Intelligence (London: Willmer Brothers Limited, 1973) p 13. This is a view that permeates the Canadian Army today to some degree in that many "operators" feel that intelligence is the purview of the intelligence branch rather than operationally driven.
[24] David A. Charters, The British Army and Jewish Insurgency in Palestine 1945-4 (London: The MacMillan Press, 1989) p. 155.
[25] Jeffery, p. 122. In some cases, this still is the first task that intelligence sections deployed on peace support operations are given in order to "familiarize the troops with the ground". This task should be the responsibility of the chain of command in order to allow intelligence staffs to focus on producing operational intelligence.

relations in Palestine were strained. This tension between the police and military resulted from a mistrust of the police by the military regarding police operational security. [26] Consequently, effective joint military-police intelligence cooperation was not achieved and no single organization was charged with the integration of intelligence from the various sources. The impact of these intelligence shortfalls on the outcome of the campaign was significant. Begin notes that the failure of British intelligence contributed to the success of the Jewish underground.[27] Palestine demonstrated that intelligence collection in a low intensity conflict demanded unique methods, which incorporated human intelligence and non-military sources. Furthermore, it demonstrated that intelligence collection must be integrated under one organization. These lessons were not lost on the British and were instrumental in the conduct of Great Britain's next counter-insurgency in Malaya.

The Malayan Emergency

Great Britain had no sooner completed counter-insurgency operations in Palestine than a new "emergency" erupted in Malaya. The Malayan insurgency officially lasted from June 1948 to July 1960. It commenced with Communist guerrillas attacks on rubber plantations, claimed by the Malayan Anti-British People's Army.[28] The British found themselves in an intelligence vacuum, Haycock argues: "At the outset the overall failure of the intelligence either to forecast the form and timing of the insurrection, or to provide anything like an enemy order of battle once it had started, seemed to give the insurgents

[26] Charters and Tugwell, p 190.
[27] Menachem Begin, The Revolt (New York: Nash Publishing, 1977) pp 97-114.
[28] Ellis, p. 209.

important advantages although these, for the most part were not taken."[29] The failure of the guerrillas to exploit this intelligence vacuum allowed time for the British to implement an effective intelligence organization. This organization took into account lessons learned from Palestine

The British, unlike in Palestine, factored in the non-military dimension of the insurgency in Malaya. The British main effort was focussed on the neutralization of the Malayan Communist Party political cadre.[30] The adoption of a non-military centre of gravity at the strategic level focussed the operational and tactical levels of the conflict to take a non-conventional approach to operations. This non-conventional approach subsequently drove intelligence operations from a non-conventional approach as well.

All credit though in terms of changing the British approach to counter-insurgency intelligence cannot be directly attributed to Palestine. The Maoist model of revolutionary warfare was beginning to become noticed by the British military. Specifically, one of Mao's fundamental strategies that "cooperation must exist between the armed guerrilla bands and the people" became deeply ingrained within British counter-insurgency doctrine.[31] Recognition of Mao's guerrilla doctrine caused a shift in focus of British intelligence doctrine from the conventional to the non-conventional. Among first areas affected by this shift in approach was the intelligence organizational structure.

The creation of an effective intelligence organization was one of the first steps in the success of the British in Malaya. By recognizing the importance of the non-military dim

which formed a triad composed of police, civilian authority, and military intelligence organizations.[32] This organizational structure also recognized the important lesson from Palestine of establishing a single intelligence integration agency. In referring to this integration, Townshend states: "The merging of all intelligence-gathering and processing under a single agency was seen by most participants as the crucial element in the counterinsurgency."[33] By establishing this combined intelligence staff, information from several agencies could now be shared, analysed and further disseminated. The exploiting and gathering of intelligence through this police-military-civil relationship recognized the theme of using non-military sources of intelligence collection. In order to collect information through these non-military sources, it was also recognized that human intelligence collection was necessary.

Military commanders acknowledged human intelligence collection as a vital aspect of gathering information in support of their operations. Consequently the most successful commanders were considered to be those that invested the time and effort to ensure that local businessmen, civilian authorities, and civilian police cooperated with their soldiers in order to encourage the flow of information.[34] This indicates a positive correlation between human intelligence collection and the successful outcome of military operations.

The importance of human intelligence in support of operations in counter-insurgencies was further recognized by a change in responsibility for gathering tactical intelligence. This development saw a shift in placing the emphasis on the tactical

[32] Anthony Short, The Communist Insurrection in Malaya. 1948-1960 (London: Frederick Muller, 1977) p. 360.
[33] Charles Townshend, Britain's Civil Wars (London: Faber and Faber, 1986) p. 162.
[34] Richard Clutterbuck, The Long Long War: The Emergency in Malaya (London: Cassell, 1966) p. 52.

commander for acquiring tactical intelligence rather than an intelligence organization. It resulted in commanders and, indeed soldiers, having to be trained and motivated to use every opportunity that presented itself as a potential intelligence-gathering event.[35] This approach represents a marked shift from how intelligence is gathered in conventional operations. In conventional operations, intelligence collection is tasked to specifically formed organizations that have special training and equipment to conduct reconnaissance operations. These reconnaissance organizations are trained to conduct conventional information gathering operations based on an in-depth understanding of potential belligerent forces' doctrine, equipment, and order of battle. Consequently, these organizations are not necessarily trained or equipped to conduct human intelligence operations in a low-intensity conflict.

The concept of a military unit specially trained to conduct human intelligence collection in a low intensity conflict was born in Malaya. The Special Air Service (SAS) was resurrected in 1950 to serve in Malaya to conduct long range deep-jungle reconnaissance missions in order to gather intelligence.[36] However, the SAS eventually developed a psychological operations capability by winning the hearts and minds of jungle tribes. Consequently, they were able to gather human intelligence from these tribesmen. The SAS establishment of intelligence collection through tribesmen was the result of first winning over their trust and loyalty. Mockaitis illustrates the SAS's success at linking human intelligence gathering and psychological operations: "at its best, the SAS combines the skills of soldiering, intelligence gathering and a very effective hearts

[35] Kitson, Low Intensity Operations pp. 296-297.
[36] Alan Hoe and Eric Morris, Re-enter the SAS: The Special Air Service and the Malayan Emergency (London: Leo Cooper, 1994) p 46.

and minds network."[37] In this role, the themes of using human intelligence to collect information from non-military sources are once again prevalent.

Palestine and Malaya serve to demonstrate the significance of incorporating the themes of human intelligence collection and non-military sources of intelligence in counter-insurgency operations. Malaya marks the transformation to conducting intelligence operations using a non-conventional operational design. The key lessons learned in Malaya are the integration of intelligence agencies, the importance of human intelligence, close police-military cooperation and the collection of intelligence through the triad formed by civil authority, civil police and the military. The British success in Malaya is often considered as the classic textbook case as how to conduct counter-insurgency intelligence operations.

THE US MILITARY EXPERIENCE IN VIETNAM

If Malaya is to be considered the epitome of successful counter-insurgency intelligence operations, namely, the US experience in Vietnam, falls at the other end of the spectrum. Where the British Army in Malaya embraced human intelligence collection and non-military sources of intelligence, the US Army largely disregarded these themes. There is little mention of the British Army's use of ISTAR technology to collect information in Malaya but it is clear that it did not play a major role. This is in contrast to the US Army in Vietnam, which relied considerably on technology to gather information. Much of the US Army's intelligence failures based on the themes of the human dimension, non-military sources of intelligence, and over-reliance on technology can be attributed to its fixation to a conventional approach to operations based on the operational design.

[37] Mockaitis, British Counterinsurgency in the Post-Imperial Era p 11.

In terms of operational design, it is apparent that the strategic centre of gravity was focussed on the defeat of the enemy's armed forces. Sarkesian comments on this emphasis: "The adversary's armed forces were the primary focus, perpetuating conventional organization and operations."[38] This focus is indicative of a conventional approach to non-conventional warfare. Furthermore, the ramifications of this approach are linked to intelligence operations, which Sarkesian summarizes by claiming: "intelligence efforts also suffered."[39] This correlation between operational design and intelligence operations reinforces the concept that intelligence operations must take into account the unique intelligence requirements of low intensity conflicts.

Because US military intelligence operations ignored the unique aspects of low intensity operations, the US did not significantly incorporate non-military sources of intelligence. Specifically, the civil-police-military intelligence structure was not effectively implemented. As such, the US military was unable to penetrate the civilian village population.[40] Similar to the British in Palestine, this resulted in the US being dependent upon South Vietnamese civil authorities for operational intelligence from the civil populations. Also much like the British in Palestine, there was no overall intelligence agency responsible to collate intelligence collected by military, civil, and police sources. This lack of a coordinated intelligence effort created serious intelligence gaps between the US Military and the South Vietnamese civil and police authorities.

Coordination of intelligence was not the only intelligence failure caused by ignoring non-military sources of intelligence. The focus of US military intelligence was

[38] Sarkesian, p 170.
[39] Ibid p. 170.
[40] Michael Hennessy, Strategy in Vietnam: the marines and revolutionary warfare in I Corps (London: Praeger, 1997) p.182.

on the regular (North Vietnamese Army) order of battle rather than on the political cadre of the irregular Viet Cong infrastructure.[41] This failure to focus intelligence operations on the non-military aspects of the insurgents illustrates a disregard for the enemy's doctrine, namely, Mao's strategy of establishing secure base areas and winning popular support of the people.[42] The US Marines are considered to have come closest to adopting a sound counter-insurgency strategy. They realized that they could not be successful without incorporating non-military aspects of intelligence gathering.[43] Through various initiatives conducted by the USMC, some patterned after the British in Malaya, the intelligence received by the allies grew better. It appears, however, that because the US Army was the dominant force, and the focus was on big unit actions, the doctrinal developments by the US Marines went largely ignored. The USMC approach was incongruous with the remainder of the US military's focus on firepower and modern weaponry.

The US military approach in Vietnam was very much driven by its doctrinal emphasis placed on firepower and airpower. This emphasis is considered to be a fixation on conventional operations: "Most US officials tend to emphasize military and technological aspects of low intensity conflict."[44] Consequently, the human intelligence dimension was largely ignored in terms of training conventional army infantry to collect intelligence.[45] This disregard for human intelligence collection is in stark difference to the British approach, which emphasized that it, was the regular army soldier who must be relied upon to collect information.[46] On human intelligence, Sun Tzu wrote:

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[41] Sarkesian, p. 170.
[42] Mao Tse-Tung, pp. 107-109.
[43] F.W. Beckett and John Pimlott, Armed Forces and Modern Counter-Insurgency (London: Croom Helm Ltd., 1985). p. 85.
[44] Collins, America's Small Wars (New York: Brassey's (US) Inc., 1991) p.77.
[45] Sarkesian, p. 170.
[46] Kitson, Bunch of Five. p. 151.

"Foreknowledge cannot be elicited from spirits, nor from gods, nor by analogy with past events, nor from calculations. It must be obtained from men who know the enemy situation."[47] Sun Tzu's words indicate that intelligence is a human process that cannot be completely replaced by technology.

The exception to the US focus on technology lies within their use of Special Forces. Much like the British in Malaya, the US Special Forces were employed to develop intelligence networks among the Montagnards as well as to execute a hearts and minds campaign.[48] However, this human intelligence capability remained inclusive to Special Forces only.[49] While the US Special Forces effectively conducted counter-insurgency operations, these operations were largely unnoticed by the rest of the US Army, which relied on technology for intelligence collection.

The US military placed much emphasis for its intelligence collection on technology in the form of satellites, U-2 reconnaissance aircraft, and signals intelligence. Despite this technological superiority, the US Military did not have the same level of situational awareness as the South Vietnamese.[50] This disparity in situational awareness indicates that technology is not always the appropriate solution. Technological intelligence gathering means had the potential and in many cases did provide invaluable enemy information, but Collin's review of low intensity conflicts reinforces that: "experience in this century indicates that human intelligence (HUMINT) is the *sine qua non.*"[51] The introduction of ISTAR technology tends to cause military forces to attempt to use it exclusively, perhaps in an effort to reduce risk to personnel. Technology- based

[47] Sun Tzu, pp. 144-145.
[48] Sarkesian, p 170.
[49] Beckett and Pimlott, p. 79.
[50] Ibid p. 89.
[51] Collins, p.78.

intelligence collection should compliment and reinforce but not replace human intelligence in low intensity conflict.

Over-reliance on technology has a further detrimental impact on the ability to collect human intelligence. The numbers of military personnel in Vietnam peaked at over half a million soldiers during the period of 1968-9. During this time, however, the US could only field about 80,000 actual combat troops. Beckett and Pimlott attribute this high ratio of support troops to combat troops: "the penalty an army pays for technological sophistication."[52] This point is directly linked to counter-insurgency intelligence collection. If the focus of counter-insurgency intelligence collection is placed upon collecting human intelligence, then the corollary is that soldiers not technology are required. Strikingly, this situation is exactly the one that the Canadian Army is beginning to find itself now as monetary constraints cause some to consider trading troops to pay for technology. Some may contend that such compromises are outside of the purview of the military to influence and are driven by government policy.

It could be argued that in Vietnam, the military intelligence effort was hampered by circumstances beyond military control. It could be claimed that the US military could not implement human intelligence and non-military sources of intelligence collection because the national and strategic levels did not recognize the human and non-military dimensions of counter-insurgency. A counter argument, however, is that despite these higher level limitations, the military still has considerable ability to tailor its operational design to meet the mission requirements.

Development of strategic operational design may preclude establishment and empowerment of civil-police primacy in intelligence operations, such as was the case in

[52] Beckett and Pimlott, p. 105.

Malaya. However, this strategic level operational design does not prevent the military at the operational level of the conflict to develop an intelligence gathering framework which supports the strategic end-state but which recognizes a non-conventional intelligence gathering approach to low-intensity conflict. Doctrine does not stipulate that strategic and operational centres of gravity must be the same. In most cases, they cannot be, and if they are, perhaps one of the levels is redundant. The aim of the mission analysis process is to determine the subordinate mi

PEACE SUPPORT OPERATIONS

Until the last quarter of the 20th century, low intensity conflicts predominantly involved regular armies participating in counter-insurgency operations or aid to domestic civil powers. In recent times, however, it appears that the future trend will see more armies participating in what is termed as peace support operations. NATO defines peace support operations as:

> those multi-functional operations conducted impartially in support of a UN or OSCE mandate involving military forces and diplomatic humanitarian agencies, designed to achieve a long term political settlement or other condition specified in the mandate in which multinational forces may be used for peacekeeping and/or peace enforcement. They include conflict prevention, peace building, peacekeeping, peace enforcement and humanitarian operations.[53]

Peace support operations, though typically associated with UN forces, can range the spectrum from the blue-bereted United Nations peacekeepers, to peacekeeping operations sponsored by alliances such as the Organization of American States in the Dominican Republic to the present peace support operations in the Balkans under the auspices of NATO. [54] Although the missions assigned to military forces in peace support operations may differ from the missions given to counter-insurgency forces, these two forms of low intensity conflict share many commonalities.

The major similarity between peace support operations and counter-insurgency operations is that both forms involve regular forces used in non-conventional roles. The belligerent forces may or may not be regular forces or may be a mix of regular and irregular troops. Similarly, the operation may be a result of an insurgency or of a

[53] North Atlantic Military Committee, MC 327/1. Military Concept for NATO Peace Support Operations (Brussels: NATO HQ, 1997) www.nato/militarycommittee/
[54] Department of National Defence, CF Operations (Ottawa: Directorate of Plans, Doctrine and Training, 1994) p. 10-1.

conventional war. In this regard, however, many insurgencies, at least in the 20th century, resulted in the eventual deployment of some sort of peace support force.[55] Further, it is reasonable to presume that in these deployments, the insurgents were still active and in themselves formed part of the intelligence requirements for the peace support force. Fundamental to the approach taken in conducting peace support intelligence operations is the non-military dimension. In this regard, much similarity between peace support operations and counter-insurgencies exists. Often the greatest challenge in a peace support operation is not dealing with military or armed factions but rather dealing with other non-military dimensions.[56] Generally, peace support operations like counter-insurgency operations must take into account the human dimension of the conflict to a degree greater than is required in conventional operations. As such, the unique intelligence aspects required to support counter-insurgencies are also applicable during peace support operations.

The unique intelligence requirements of peace support operations are driven by the development of the operational design. The operational design of peace support operations share many similarities with counter-insurgency operations. Similar to counter-insurgency operations, the centre of gravity of a peace support operation is often not fixated on military or armed factions. The mission in a peace support operation is accomplished through many lines of operation that are non-military in nature. Lines of operation support the accomplishment of the mission through achieving several intermediate objectives. In recent peace support operations in the Balkans, the mission

[55] Ellis, p. 10.
[56] Maj Shane Schreiber, "Creating Compliance: Some Lessons in International Cooperation in a Peace Support Operation," Canadian Military Journal Vol 2 No.4. Winter 2001-2002. p 13.

statement has been worded as the "Maintenance of a secure and stable environment".[57] This mission is accomplished through the lines of operation of security, compliance, restoration of civil order and civil military cooperation.[58] These lines of operation are distinct from those that support conventional warfighting and therefore require unique intelligence considerations to achieve them. During peace support operations, the military may only be the lead organization in one of these lines of operation, namely, security. The lines of operation of compliance and restoration of civil authority are usually the responsibility of civilian police and International Organizations (IOs). Consequently, similar to counter-insurgency operations, there is a requirement to use non-military sources of intelligence to support the mission.

Many of the techniques of using non-military sources of intelligence during peace support missions can be borrowed from the British manner of conducting counter-insurgency intelligence operations. Mockaitis notes that the British generally adopt a more holistic and integrated approach: "The most striking feature of the British counter-insurgency has been its unified approach: soldiers, police, and civil administrators."[59] In the Canadian context, the British approach is relevant, as Canadian Forces have often been assigned to British Army formations during peace support operations. This British approach of integrating the military with civilian authorities and police further dictates a requirement for the use of non-military intelligence collection and integration.

Non-military sources, such as police, civil administrators, IOs, and NGOs, provide the greatest opportunity to gather intelligence. These sources provide a

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[57] First Battalion, The Royal Canadian Regiment, "Operation Order 02/99 OPERATION KINETIC ROTO 1 - Phase four: employment" (Petawawa: 1 RCR BG Ops O, 1999) p. 4.
[58] Compliance refers to the adherence of an accord or agreement signed by the belligerents, usually in respect to observing military postures, weapon limits, and troop locations.
[59] Mockaitis, Peace Operations and Intrastate Conflict (Westport CT: Praeger Publishers, 1999) p. 134.

connection with the indigenous population at all levels. The greatest challenge that regular forces face is firstly recognizing the value of this "informal intelligence network" and secondly using a disciplined systematic approach to collecting and collating information. Among the chief drawbacks of current peace support operations is that unlike the British in Malaya, Kenya or Oman, no formal intelligence integration organization for this network exists. As such, the military must take the initiative in establishing itself in this role. It is very difficult to establish this multi-agency intelligence network in one step because different agencies deal with different military elements. Consequently, relationships must first be established between the civilian agencies and their affiliated military counterpart before these agencies can be integrated to collect and share non-military sources of intelligence.

One of the most important sources of non-military intelligence are civilian police task forces. Typically, the civilian police task force is a UN mandated force established in order to assist "police reform in transition from war to peace."[60] Examples of such organizations are the International Police Task Force (IPTF) in Bosnia and the United Nations Interim Administration Mission in Kosovo (UNIMIK) Police in Kosovo. As in counter-insurgency operations, there is a requirement in peace support operations for criminal intelligence stemming from police investigations.[61] In Kosovo, while the military had tactical police primacy in much of the area of operations, the police always retained investigative primacy.[62] It was during these police investigations where most criminal intelligence was produced. The requirement for criminal intelligence is derived

[60] Tor Tanke Holm and Espen Barth Eide, Peacebuilding and Police Reform (London: Frank Cass, 2000) p. 1.
[61] Jefferey, p.142.
[62] The term tactical police primacy refers to the military responding first to all incidents. If the police did respond, they required military reinforcement for security.

from the interrelationship between belligerent armed entities and organized crime. The military's monitoring of Entity Armed Forces (EAF) and the police's mandate against organized crime support the creation of a joint military-police relationship.

The intelligence relationship between the police and military should be symbiotic. Police can benefit from information gathered in daily or special military operations, such as criminals apprehended or observed at checkpoints or during patrols. Similarly, the military can benefit from police information, which may provide intelligence on security threats stemming from the belligerent armed forces. Examples include police reporting on movements of EAF, irregular meetings between EAF commanders and politicians, and arrests or observations of insurgent leaders. In order for police-military intelligence sharing to occur effectively, some challenges must be overcome.

Among the greatest challenges in developing this non-military source of information is a basic incompatibility between police and military intelligence structures. Military intelligence staffs are always subordinate to operational staffs. The opposite is often true of police intelligence staffs, which usually have executive authority.[63] This issue can be overcome by ensuring that both military operations and intelligence staffs establish liaison with police intelligence staffs in order to be able to plan and execute operations. A second and greater challenge is that often, no integrating organization for intelligence collection and analysis exists. In this case, the military must take the initiative to establish the medium for such an intelligence integration organization.

Joint military-police intelligence integration can be established by the military inviting the police to attend operations planning sessions. During these sessions, future operations are planned, and intelligence from past operations is disseminated. In Kosovo,

[63] Jefferey, p.144.

the police were initially hesitant in attending these planning boards, and intelligence only appeared to flow from the military. Similarly, police were initially reluctant in participating in all military operations. However, with time, these sessions began to build trust between military and police staffs and served as an ad hoc integrating agency. These sessions eventually began to be conducted at the operational and tactical levels from corps to company. Similar cooperation between the military and police has been established in Bosnia during IFOR and SFOR missions.[64] The effective establishment of police-military intelligence sharing is one of the key aspects in developing the non-military sources of intelligence collection during peace support operations. The other key non-military intelligence source is derived from civil-military relations.

The civil-military relationship is usually referred to as civil-military cooperation (CIMIC). Within the context of intelligence gathering it is more useful to consider this relationship separately in terms of its two doctrinal categories, which are civil-military cooperation operations and support to civil administration.[65] Although collectively both categories fall within the area of CIMIC, organizationally they are structured differently and, therefore, the forming of intelligence relationships can be created independently. Furthermore, each category produces different non-military sources of intelligence.

Within CIMIC, the most important intelligence relationship to establish is CIMIC in support of the civil administration. Within this context, the civil-military relationship is established between military forces and IOs that are responsible for re-establishing the transition to civilian government. Usually, these organizations consist of either the United Nations (UN) or the Organization for Security and Cooperation in Europe (OSCE) or

[64] Schreiber, p. 15.
[65] Department of National Defence, Civil-Military Cooperation in Peace, Emergencies, Crisis and War (Ottawa: Directorate of Plans, Doctrine and Training, 1999) pp. 1-10.

both. In Kosovo, the UN was charged with reestablishing civilian government functions through UNMIK, while the OSCE was responsible to implement and conduct elections for various levels of government.[66] Within the Canadian AOR, both organizations were present at the county and municipal levels.

The degree of success in developing relationships between the military and IOs is related directly to the extent that these organizations need military assistance to achieve their mandates. As in police-military relationships, these CIMIC relationships should be reciprocal. In the case of Kosovo, both organizations relied on the military for security. UNMIK needed military security in matters, which ranged from protecting money shipments to evicting Kosovo Liberation Army (KLA) and Kosovo Protection Corps (KPC) units from infrastructure needed for government administration. Similarly, the OSCE required military assistance in support of securing political meeting sites and eventually election sites. A similar situation in Bosnia was described by Schreiber: "it was considered that SFOR could best fulfill its role by serving as the aegis under which the other IC (international community) actors could carry out their work without fear of intimidation or reprisals."[67] The reliance of these organizations on the military allows for the development of civil-military intelligence collection.

The military provides intelligence to these organizations, which they require in order to fulfill their mission. An example may include the provision of Entity Armed Forces (EAF) orders of battle in order to preclude EAF personnel becoming involved with politics, which was forbidden within the terms of the demilitarization of the Kosovo

[66] Ted Galen Carpenter, NATO's Empty Victory: A Postmortem on the Balkan War (Washington DC: CATO Institute, 2000) p. 140.
[67] Schreiber, p.13.

Liberation Army (KLA).[68] Reciprocally, these organizations provided information to the military, which was relevant to the military's mission. Examples include the provision of information on extremist political activity and political parties linked to EAF leadership. The focus of intelligence derived from civil administrations should be political intelligence. As in counter-insurgency operations, political intelligence is vital in order to understand the motives influencing armed factions.[69] Civil administrators are in the best position to receive information on government and political activity.

The establishment of intelligence relationships with civilian administrations is very challenging. This challenge is especially significant at the tactical level where no formal relationships exist. Some administrators in charge of regional or municipal administrations may have a disdain for the military or view the military presence as a constant reminder that their mission has not yet been accomplished. In terms of intelligence sharing, this relationship becomes even more fragile as these organizations do not want to damage their impartiality. In this case, intelligence may be uni-directional and these organizations may only "rely on the military force for situational briefings in order to facilitate the implementation of their mandate."[70] However, this uni-directional flow of information can be mitigated or reversed through the military conducting CIMIC operations.

The most commonly understood category of CIMIC is civil-military cooperation operations (CMO). CMO is defined as "a military operation, the primary intention and effect of which is to support a civilian authority, population, IO or NGO, the effect of

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[68] United Nations Interim Administration Mission in Kosovo, "The Undertaking of Demilitarization and Transformation of the UCK," (Pristina: UNMIK HQ, 24 Jun 1999)
[69] Hennessy, p 184.
[70] Civil-Military Cooperation in Peace, Emergencies, Crisis and War pp. 2-6.

which is to assist in the pursuit of a military objective."[71] CMO produces intelligence that is different than what is produced through support to civil administration. The focus of CMO rather is the production of intelligence on the indigenous populations. CMO can produce intelligence on armed factions, criminal activity, and political activity. As such, CMO intelligence is more general in nature and is acquired through several different mechanisms.

CMO allows a direct contact between the indigenous population and the military forces without raising the suspicions of belligerents. This contact mechanism is important as often, the local population is hesitant to make contact with the military forces as observed by Jefferey: "When people are reluctant openly to provide information, some mechanism needs to be set up to enable them to communicate with the security forces while avoiding the risk of being branded as an informer."[72] CMO allows such a mechanism, especially at the soldier level since CMO is executed at the lowest level.

The de-centralized conduct of CMO provides many opportunities for direct exposure between civilians and soldiers. This exposure can manifest itself through low-level projects such as repairing infrastructure, building playgrounds, and distributing relief. [73] Most activities are conducted at the company, platoon, or section level as part of the normal daily routine. As such, soldiers and civilians are regularly in contact without suspicions being raised. Information can be gathered through normal conversation, but also as a result of soldiers being sensitized to atypical activity. As in counter-insurgency

[71] Civil-Military Cooperation in Peace, Emergencies, Crisis and War pp. 1-10.
[72] Jefferey, p.133.
[73] In KOSOVO, 1 PPCLI and 1 RCR BGs' pioneer platoons were used in village roof repair projects to teach locals how to repair roofs damaged from the war.

operations, a secondary effect of this contact is the ability to win the support of the local population.

Gaining the support of the indigenous people is a vital step in being able to gather human intelligence, as it is unlikely that a hostile population will proffer intelligence. CMO is often considered within the phrase of winning hearts and minds, a term, which is attributed to originating during the Malayan emergency.[74] The CMO approach to winning over the civilian population can vary as Mockaitis observes: "providing wells, homes, schools and hospitals…often transformed a hostile population into a cooperative one. Cooperation, in turn, provided intelligence."[75] Regardless of the CMO mechanism, the provision of human intelligence can be a by-product. These CMO projects also provide human intelligence through the involvement of NGOs.

One of the chief benefits of CMO is that it allows for exposure to NGO networks that can provide non-military sources of intelligence. This interface with NGOs usually occurs at the higher level within the CIMIC Operations Centre (CIMOC). At this level, NGOs and military CIMIC staffs meet to coordinate CIMIC activities. As NGOs work independently, they can be exposed to several different factions, which may be outside the military area of operations. The CIMOC provides a location which draws these NGOs into military contact: "easy access to CIMIC centres, fosters trust and confidence among stakeholders resulting in an exchange of information about the situation, events or incidents occurring in the AO and which are known only to IOs, NGOs…and therefore have access to information not readily available to military personnel."[76] As such, the CIMOC provides an intelligence function that may be impossible for the military to

[74] Susan L. Carruthers, Winning Hearts and Minds (London: Lelcester University Press, 1995). p.1.
[75] Mockaitis, Peace Operations and Intrastate Conflict p 133.
[76] Civil-Military Cooperation in Peace, Emergencies, Crisis and War pp. 5-16.

replicate due to geographic and operational constraints. The first challenge in the success of a CIMOC is to develop relationships with NGOs to ensure they will be drawn to it. In describing the relationship between CIMIC staffs and NGOs in Bosnia, Schreiber reports: "by personalizing the channels of communications, an excellent rapport was developed and maintained. This allowed all involved to increase their situational awareness."[77] As such, NGOs must perceive that it is valuable for them to use the CIMOC and that the environment is benign. This latter challenge is sometimes very difficult for the military to achieve as it often involves dealing with NGOs in a non-military, less structured and informal manner. However, once NGOs believe that the CIMOC is valuable and receptive to their needs, they inevitably will take advantage of it as other coordination centres seldom exist in a theatre of operations.

NGOs come to rely on the CIMOC for its coordination capability for an area of operations. In this regard, the CIMOC performs another intelligence function in that it serves as an *ad hoc* integrating organization. Often, the CIMOC is the only coordination node for humanitarian aid in a given region. For this reason, NGOs realize the usefulness in attending regularly scheduled CIMIC coordination meetings. These conferences can serve as excellent sources of information as each NGO reports on their progress and concerns during a given period of time. The CIMOC therefore acts as central depository for NGO information. The major challenge to the military is that operations and intelligence staffs must recognize the CIMOC as a valuable non-military source of intelligence collection and integration.

[77] Schreiber, p. 15.

A military force in a peace support environment can establish several non-military sources of intelligence including police–military, military-civil administration, and civil-military cooperation operations. Different military staffs exist within each one of these bi-lateral relationships. For example, the police relationship would involve operations staffs, the civil administration affiliation usually involves commanders and the CMO involves CIMIC staffs. The value of integrating intelligence collection in low-intensity conflict is a common theme throughout much literature.[78] Since no single organization exists for intelligence integration during peace support operations, the military must take the initiative to implement such an agency.

In Kosovo, an integrating medium was achieved at the tactical level through the establishment of a local security council based on the county system. This council was established in order for all stakeholders to be able to voice and share security concerns within the area of operations. As such, its membership included the UNMIK Administrator, the OSCE field office chief, the UNMIK Police Chief, UNHCR representative, EU representative and several representatives from various NGOs working in the region. The council was convened on a weekly basis and was chaired by the Battalion Commander. Formal agendas and weekly minutes were produced in order to capture and disseminate information.[79] Each meeting commenced with a military intelligence brief covering the major events of the previous week. In turn, each attendee voiced concerns for incidents, which occurred, or for impending operations. In Bosnia, Schreiber describes similar councils called Interagency Co-ordination Meetings (ICM):

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[78] Karl Hack, "British Intelligence and Counter-Insurgency in the Era of Decolonization: The example of Malaya," Intelligence and National Security Volume 14 No.2. Summer 1999. p.128.
[79] First Battalion, Princess Patricia's Canadian Light Infantry, "Minutes from the Glogovac Security Council," (Donja Koretica, Kosovo: 1 PPCLI BG HQ, 6 Dec 1999).

"In short, the IMC was an excellent forum, not just for coordinating the International community (IC) effort within Canton 10 but also for helping participants develop and maintain a high level of situational awareness."[80] Situational awareness gained from these meetings often contributes to the satisfying of primary intelligence requirements.

The true intelligence value from these councils did not arise from discussions aimed at the military since this information could be obtained through one of the bilateral liaisons. Instead, the most useful information came from discussions between the other members of the council. The military would not necessarily be privy to this type of information as it was not topical within any of the bi-lateral affiliations. The establishment of these councils, albeit in an ad hoc fashion, replicates the integration of the non-military sources of intelligence that was initiated by the British in Malaya.[81] This approach to intelligence gathering is also similar to the approach used in counter-insurgencies in that it incorporates human intelligence collection.

The gathering of intelligence from non-military sources during peace support operations places an emphasis on Human Intelligence (HUMINT). The CF recognizes the importance of HUMINT collection during peace support operations, however, there is a shortfall in personnel qualified to collect and process HUMINT. The importance of HUMINT as well as this shortfall in qualified personnel was made apparent in a very recent request for CF personnel to volunteer for HUMINT duties in Bosnia.[82] The CF has been in the Balkans for over a decade, yet is only implementing a program now to incorporate HUMINT collection in this theatre. This overdue request for HUMINT

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[80] Schreiber, p. 15.
[81] Brian Stewart, "Winning in Malaya: An Intelligence Success Story," Intelligence and National Security Volume 14 No.3. Autumn 1999. p. 276.
[82]Department of National Defence, "Human Intelligence operations in Bosnia-Hercegovina-requirement for CF personnel. (National Defence Headquarters, Ottawa:CANFORGEN 030/02 DCDS 058, 04 Apr 02) p.1.

personnel is indicative of the CF's disregard of the unique intelligence requirements of peace support operations, particularly in the area of HUMINT.

HUMINT during peace support operations is developed through what is termed as contact intelligence. Contact intelligence is intelligence derived from information that flows from human sources and is collected during daily routine operations. These operations include foot patrolling, vehicle checkpoints, searches, CIMIC projects, and contact with civilian indigenous labour. By virtue of numbers and repetition of routine activities, soldiers are best positioned to be exposed to contact intelligence as illustrated by Charters: "in effect, everyone is a potential source, and every peacekeeper is an intelligence collector."[3] This is similar to the philosophy held by the British in Malaya where the responsibility for gathering intelligence was de-centralized. The emphasis therefore for the collection of HUMINT is placed upon the soldier.

The Canadian Army does a fair job at developing the ability of its soldiers to collect HUMINT. Just as the British learned during their counter-insurgency operations, the average Canadian soldier can be trained to a high level of ability in collec

endless hours spent on patrol, at checkpoints, in observation posts and supervising civilian labour sensitizes them to differentiate between the typical and atypical. Last, and perhaps most importantly, is the sheer experience gained on multiple peace support operations. This experience teaches soldiers but more specifically, Non-Commissioned Officers at the section commander level what to look for. This experience is then passed on to the soldiers.

Experience from past operations is not enough and the Canadian Army should do more to develop the skills of collecting HUMINT. Other than a few days of ad hoc theoretical and practical training prior to deployment, no formal HUMINT training exists. The CF does not conduct HUMINT courses, which train "operators", i.e. infantrymen and other combat arms personnel in HUMINT collection. The irony here is that numerous offered courses involve conventional ISTAR operations but the preponderance of operational requirement in utilizing these skills lie in the non-conventional environment. Conventional ISTAR training does not include HUMINT training.

Intelligence branch personnel may receive HUMINT training. However, they are not ideally suited for this task as there are far too few of them and their focus should be on the collation and analysis of raw information rather than collection.[86] Further, they cannot be sufficiently sensitized with the area of operations as can a section commander who conducts daily patrols. Rather, there are requirements for operators to receive formal HUMINT training for operations in peace support environments. Such courses certainly exist amongst our allies. In Kosovo, some HUMINT training was conducted with allied forces. Such courses would teach skills, which may not be fully developed through experience alone, just as the Army does not rely on experience to replace formal

[86] Kitson, Bunch of Five p. 61.

conventional ISTAR training. Despite the importance of HUMINT collection that has been demonstrated both in counter-insurgency and peace support operations, an over-reliance on technology is apparent in the manner in which ISTAR operations are conducted.

This over-reliance on technology to collect information is apparent in the intelligence collection plans in theatre. To illustrate this deficiency, a review of a weekly ISTAR matrix from Kosovo, a document used to coordinate information collection shows a task emphasis placed on conventional high-technology ISTAR assets, such as reconnaissance platoon, anti-armour platoon (due to its high power optics and thermal imagery), sniper section, aviation and electronic warfare (EW). These types of conventional ISTAR assets produced very little useful intelligence as indicated by post-operational reports from CF missions in Bosnia and Kosovo.[87] In the main, these types of high-technology systems are easily defeated.

For the most part, these assets are quickly made irrelevant as they rely on large noisy platforms, which are easily detected and identified by belligerents as a surveillance platform. Canadian Forces in Kosovo did not deploy with EW assets. However when coalition EW was used in support of an intelligence operation these elements had little success. This lack of success was chiefly due to the fact that they were monitoring a relatively low-technology adversary that did not rely on high technology communication systems and therefore made these detection systems irrelevant. High technology conventional ISTAR systems cannot alone support the collection of the unique intelligence requirements of peace support operations, namely, HUMINT.

[87] Directorate of Army Doctrine, "Post-Operational Report- OP KINETIC ROTO 1 Phase IV Employment," (Petawawa: 1 RCR BG, May 2000) Question Series 59.

The emphasis on HUMINT illustrates that peace support intelligence operations rely chiefly on the soldier. Technology-based ISTAR systems and sensors still have their place in peace support missions. However, these "conventional" ISTAR systems should be regarded with the same rationale that serves as the justification for employment of a whole range of conventional platforms on a peace support operation. Their role is to deter and, if necessary defend against potential aggressors. Typically, however, except during a "show of force" operation, they are not used in routine operations. This line of reasoning appears to be tainted though when it comes to conventional ISTAR systems, which are typically and unsuccessfully used in an attempt to gather intelligence. As such, a reevaluation of the employment of conventional ISTAR assets must be conducted in an attempt to address intelligence requirements.

The intelligence requirements of peace support operations are more complex than that of a conventional conflict and arguably perhaps even more so than counter-insurgency. Peace support operations are characterized by an "increased reliance on HUMINT" and success is dependent on the integration of non-military sources of intelligence.[88] An over-reliance on high technology intelligence collection has shown to produce poor results during recent Canadian peace support operations. Many militaries recognize that low intensity conflicts, whether in the form of counter-insurgency or peace support operations will prevail as the predominant form of warfare of the future.[89] Despite this recognition however, it appears that most modern Western militaries are continuing to focus on a high-tech, high-intensity warfare approach to intelligence operations of the future.

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[88] US Army, Peace Operations (Washington DC: Department of the Army, 1994) pp. 44-45.
[89] Melissa Applegate, "Preparing for Asymmetry: As Seen through the lens of Joint Vision 2020," Strategic Studies Institute (Leavenworth, KA: US Army War College, 2001) p. 2.

FUTURE LOW INTENSITY CONFLICT

The unique intelligence requirements of counter-insurgency and peace support operations reflect the human dimension of low intensity conflict. The themes of non-military sources of intelligence and human intelligence collection do not rely heavily on technology to support intelligence operations in low intensity conflict. Consequently, many of the intelligence lessons learned from counter-insurgency operations and peace support operations might be disregarded or undermined in future conflicts in light of the emphasis placed on technology resulting from the current RMA. RMA technologies will have a direct impact on the role of military intelligence.

Military intelligence will play an increasingly more critical role in future low intensity conflicts. Specifically, the relationship between technology and intelligence operations will grow closer as the RMA is fuelled by information technology which is closely associated to ISTAR. This reliance on technology to support intelligence operations might have detrimental implications if conflict of the future is characterized by fourth generation warfare.

The terms "fourth generation warfare" and "asymmetric warfare" appear to replace the term "low intensity conflict" in the literature describing future non-conventional conflicts. Typically, they are defined as forms of warfare where " one side is something other than a military force organized and operating under the control of a national government."[90] As such, fourth generation warfare fits within the earlier definition of low-intensity conflict. Asymmetric warfare is defined as warfare where a weaker opponent seeks to "neutralize their opponent's technological or numerical

[90] Defense and the National Interest, "Fourth Generation Warfare," Internet source. 2002. www.d-n-i.net/FCS_Folder/fourth_generation warfare.htm.

superiority by fighting in ways or on battlefields that nullify it."[91] Again, this definition closely resembles earlier definitions of guerilla warfare. Though both these terms appear to be new, as Goulding observes: the "term *du jour* for military operations…it is a concept as old as warfare itself."[92] Despite these changes in name, fourth generation warfare and asymmetric warfare are essentially the same as guerilla warfare in character. As such, the lessons derived from the study of past counter-insurgencies and past and present peace support operations are applicable to the low-intensity operations of the future, regardless of the new terminology used to describe them. As in past and current low intensity conflicts, irregular forces will attempt to nullify the perceived strengths of regular forces.[93] The only chance for weaker irregular forces to win against large conventional forces is to avoid the conventional forces' strengths.

The strengths of armies of the future are heavily reliant on technology. This dependence on technology is apparent in several visionary documents.[94] Specifically, these visions share one thing in common: an overwhelming reliance on information technology, the catalyst of the current Revolution in Military Affairs.[95] Therefore, a logical tactic for future guerillas will be to take measures that defeat or make irrelevant, these information technologies. Using the US Army as an example, its vision of the future is reflected within the US Army's Transformation Program, which is "based on

[91] Vincent J. Goulding, Jr., "Back to the Future with Asymmetric Warfare," Parameters Winter 2000-01, p 1 www.intellnet.org/documents/700/030/738.htm
[92] Ibid p. 1.
[93] Lieutenant Colonel Donald A. La Carte, "Asymmetric Warfare and the Use of Special Operations Forces in North American Law Enforcement," Canadian Military Journal Vol. 2 No. 4. Winter 2001-2002. p 23.
[94] Chairman Joint Chief of Staff, "US Military Joint Vision 2020," (Washington: US Department of Defense, 18 Jan. 2002) http://www.dtic.mil/jv2020/jvpub2.htm
[95] Elizabeth A. Stanley-Mitchell, "Technology's Double Edged Sword: The Case of US Army Battlefield Digitization," Defense Analysis Vol.17, No.3. 2001, p 269.

information superiority."[96] Clearly, a very close link exists between information superiority and intelligence operations as each rely on aspects of the other. In the main, the army of the future will achieve information superiority through exploitation of technological innovations.

Technological innovation will drive intelligence collection of the future. In terms of intelligence collection and processing, future armies intend to be able to "see first, decide first and act first."[97] This vision is by no means solely a US Army initiative. The CF also intends to increase its integration of Intelligence, Surveillance and Reconnaissance (ISR) through technology. As the US is our closest ally, it is not surprising that the Canadian Army's vision of the future is very similar to that of the US Army's Objective Force and its integral Future Combat System.[98] Both visions incorporate a network centric "systems of systems."[99] Fundamental to this approach is the networking of ISTAR sensors to platforms, often referred to in US terminology as "sensor to shooter". [100] Many of these systems are envisioned to be unmanned and will remove the "soldier from the loop" in an attempt to reduce casualties.[101] Unmanned sensors will collect information in order to reduce human exposure to dangerous situations. Ironically, it is the "man in the loop" who is best suited for low-intensity conflict intelligence operations. As such, there is some skepticism to this approach as Nelson articulates: "Informed advocates of the new technology abound, and it seems to

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[96] Gansler, Association of the U.S. Army Winter Symposium and Exhibition.
[97] United States Army, "Concepts for the Objective Force," United States Army White Paper 12 Oct 1999. www-cgsc.army.mil/dsa/CGSOC2002/Briefings/CmdInfo/CSA-ObjectiveForce.htm
[98] Commander Josh Barber, "An Intelligence, Surveillance and Reconnaissance Vision for the Canadian Forces," Canadian Military Journal Vol. 2 No. 4. Winter 2001-2002 p. 45.
[99] Dr. Stotts, "NDIA Armaments for the Army Transformation. Develop technologies and prototype systems for the Objective Force," 20 Jun 01. www.dtic.mil/ndia/2001armaments/appel.pdf
[100] Lt Gen Riggs, "Building an Army begins with the Soldier," Objective Force Task Force. 9 Nov 2000. www.darpa.mil/fcs/LINKED/Nov9/Nov_AUSA_Riggs_Right.ppt
[101] Gansler,. Association of the U.S. Army Winter Symposium and Exhibition.

offer the promise that fewer combat soldiers will be needed, and fewer will die needlessly. The vision is alluring, but that does not make it accurate."[102] This approach fails to recognize the human dimension of intelligence collection in favour of reliance on technology.

The highly technologically based intelligence collection capability of armies of the future should be well suited for conventional operations. A dichotomy, however, in the preparation for what is deemed to be the most likely threat exists. Armies are structuring conventionally as Stanley-Mitchell suggests: "emerging threats across the conflict spectrum suggest that conventional warfare in open terrain- where the Army has focused its digitization efforts- may not be what future warfare is all about."[103] Even many doctrinal publications recognize that the future will increasingly involve participation in low intensity conflicts as described by Shalikashvili: "While we have historically focused on warfighting, our military profession is increasingly changing its focus to a complex array of military operations-other than war."[104] Despite this recognition, the visions for most armies of the future are conventionally oriented and over-reliant on technology, which may not be suited to low intensity conflicts.

Low intensity conflict intelligence operations will not be adequately supported by these highly technological collection systems. Low intensity operations may not be able to employ such advanced sensors in a low technology environment as Charters indicates: "even high intensity peacekeeping operations only have a limited requirement for RMA-

[102] Harold Nelson, "Intelligence and the Next War: A Retrospective View," Intelligence and National Security Volume 2 No.1. Jan 1987. p.133 .
[103] Stanley-Mitchell, p. 275.
[104] General John M. Shalikashvili, Joint doctrine for Military Operations Other Than War: Joint Pub 3-07. US Chairman of the Joint Chiefs of Staff (Washington D.C.: US Dept of Defense. 16 June 1995) p. 1.

type technical collection means."[105] The reliance on digital information and what is pictured on a screen may be irrelevant information. It may preclude true operational awareness if it fails to capture human intelligence, especially HUMINT from non-military sources, which may not be able to be "probed" by automated sensors. Much of the most important information in low-intensity conflicts cannot be measured or detected by unmanned sensors as Stanley-Mitchell reinforces: "In certain situations, these other inputs-for example, political and environmental conditions-could be more important than the data provided by the screen."[106] In low intensity conflict, screens may not be able to portray any meaningful intelligence, as the only source of information may be HUMINT. The focus on RMA-type intelligence collection ignores the human dimension required in low-intensity conflict.

If low-intensity conflicts of the future come to be characterized by asymmetric warfare, then by definition, irregular forces will attempt to nullify high technology intelligence collection means. In this sense, an asymmetry has already been created for irregular forces, namely, the asymmetry of "low-tech against high-tech."[107] In some cases, the reliance on high technology collection methods creates critical vulnerabilities, which can be attacked or exploited. In other cases, these means may be simply made irrelevant through the fact that the irregulars are fighting at such a low-technology level that methods such as signals intelligence (SIGINT) and space-based sensors simply do not gather any information.[108] Other asymmetries also exist which can be exploited.

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[105] Charters, p. 51.
[106] Stanley-Mitchell, p. 276.
[107] Dr. Michael Ignatieff. "Ethics and the New War," Canadian Military Journal Vol 2 No.4. Winter 2001-2002. p7.
[108] Barber, p. 43.

Just as guerillas will exploit technological asymmetry, they will also exploit organizational asymmetry. Organizational asymmetry exploits the rigid structures of conventional forces. Ignatieff poses the dilemma: "how do you destroy an enemy who is not fielded against you in an organized military structure?"[109] Conventional high-technology RMA-collection means envisioned for the future are designed and programmed to detect conventional forces. These sensors are deployed along avenues of approach that support mobility corridors for doctrinally templated units and formations. Similarly, the use of UAVs will be instrumental in collecting information on concentrated manoeuvre and artillery formations.[110] Their utility, however, in detecting small groups of well-dispersed irregulars with a high degree of freedom of action is very questionable. In counter-insurgencies, information gathered through HUMINT and from non-military sources was the most effective means of detecting small bands of guerillas. As well, as in the past, when new technology is introduced, its effects are dramatically decreased after initial exposure. Humans learn quickly to overcome technology.

The use of complex terrain is an effective way to overcome technology. Guerillas operating in small units and who are not dependent upon technology can easily move into complex terrain in order to mask their presence. Space-based sensors, radars, and thermal imaging are easily defeated in complex terrain, especially in what is predicted to be the new battlefields of the future, namely cities.[111] This trend is already apparent in present day conflicts. The urban battlefield contributed to the "intelligence failure" of the

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[109] Ignatieff, p. 7.
[110] DARPA, "Networked Sensors for the Objective Force. Specifications Requirements," III.IS.2001.02. http://www.darpa.mil/tto/programs/fcs.html
[111] United States Marine Corps, "Military Operations in Urban Terrain," http://www.specialoperations.com/mout/

Russian Army in Grozny.[112] Complex terrain is considered as among the asymmetric strategies that may easily defeat the US Army's digitization efforts and one, which is not currently being addressed by the Army.[113] Similar to the US Military experience in Vietnam, the USMC does recognize the significance of complex terrain on the future battlefield. As such, the USMC is expending considerable effort in developing doctrine, techniques, and equipment to overcome the challenge of complex terrain, especially in cities. Similarly, as in Vietnam the US Army's high-tech ISTAR systems of the future do not address the capability to be able to collect intelligence on non-military factors.

An over-reliance on technology ignores the consideration that fourth-generation warfare results from a broad range of non-military destabilizing factors.[114] It is these non-military factors that largely make technology ineffectual in dealing with fourth-generation warfare for two reasons. First, high-tech collection assets cannot detect the non-military aspects of low-intensity conflict. Second, these assets do not have the ability to collect subtle information as can be collected by HUMINT. Wilson argues: "if recent events show anything, it is that advanced technology warfare is largely ineffective against terrorism and fourth generation opponents."[115] This ineffectiveness occurs because technology can be easily defeated or made irrelevant in low intensity conflict. This ineffectiveness results from a fixation on a conventional approach to non-conventional warfare.

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[112] Lester W. Grau and Timothy L. Thomas, "Russian Lessons Learned From the Battles For Grozny," Foreign Military Studies Office (Fort Leavenworth, KS: Internet source, Apr 2000). http://fmso.leavenworth.army.mil/FMSOPUBS/ISSUES/Rusn_leslrn.htm

[113] Stanley-Mitchell, p. 280.

[114] G.I. Wilson, F. Bunkers and J.P Sullivan, "Anticipating the Nature of the Next Conflict," (19 February 2001, p 3). www.emergency.com/emergency-thrts.htm

[115] Ibid .

It appears that fixation on conventional warfare is at the expense of ignoring other forms of conflict. There is recognition that when conventional operations are envisioned, then HUMINT becomes dormant as described by Perkins: "as DOD prepared for the Cold War to go hot, CI and HUMINT took a back seat."[116] In the context of the US Army, it has been its participation in recent OOTW, especially Bosnia that has rekindled the recognition and requirement for HUMINT. Future low intensity conflicts will continue to require HUMINT to support intelligence operations.

Within the CF context, two areas require consideration for HUMINT support to future operations. The first has been discussed previously in relation to peace support operations. It is the requirement for operators to receive HUMINT training. The US Army in Bosnia has recently identified this requirement for its own forces and has concluded that more soldiers require HUMINT training and that operational staffs must be taught how to use and conduct HUMINT operations.[117] This is indicative that high-technology ISTAR assets alone cannot support the unique intelligence requirements of peace support operations. The requirement for HUMINT training has been similarly identified in CF post operational reports.[118] These reports have concluded that HUMINT training is required to support low intensity conflict intelligence operations. The second aspect required to adequately support future CF operations involves the use of linguists.

Linguists are essential for a military force to be able to conduct effective HUMINT operations as well as incorporate non-military sources of intelligence. The CF currently has no HUMINT linguist capability. A former Canadian Contingent

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[116] LTC Perkins, "HUMINT/CI," Office of the Deputy Chief of Staff for Intelligence. www.fas.org/irp/ops/smo/docs/bosnia_human/int/humint.htm

[117] Ibid .

[118] Directorate of Army Doctrine, "Post Operational Report-OP KINETIC ROTO 0 Phase IV Employment," (Donja Koretica, Kosovo: 1 PPCLI BG HQ, 27 Nov 1999) Question series 55.

commander in Kosovo stated :"We need to find a procedure for vetting and hiring Canadians to serve with our troops as interpreters."[119] This requirement is vital, if HUMINT is to be fully implemented. Currently, local translators are hired in order to act as linguists. There are many problems with this arrangement. Their impartiality can never be verified. Consequently, they cannot be used except to translate unclassified material and conversations. As these translators are local, they can easily be intimidated into passing information on to belligerents.

For the CF to possess its own linguists offers many advantages. First, they can be used in classified operations such as Electronic Warfare (EW). CF linguists, posing as soldiers could verify conversations between indigenous translators in order to certify their reliability. As well, linguists accompanying commanders and posing as security could monitor conversations being held between belligerents during negotiations. Similarly, a linguist could accompany patrols and would be able to listen to conversations as the patrol passes through built up areas. Communication ability is instrumental to collecting HUMINT as Charters emphasizes: "Understanding the local language, is a *sine qua non* of intelligence operations in Low Intensity Conflicts."[120] It is vital in a way that is not important to conventional operations. It recognizes the importance of the human dimension of low-intensity conflict intelligence collection.

Intelligence collection during future low-intensity operations must have doctrine developed specific to these operations. Unlike the US, which has a manual dedicated to intelligence support to low intensity conflict, there are no CF intelligence manuals

[119] Rudd, Hanson and Stinson, p.20.
[120] Charters, p. 48.

specifically devoted to OOTW. [121] This shortfall must be addressed in the future, especially in light of the move toward high-tech collection assets. If not, as Charters correctly contends, operators will revert to "simply re-tasking intelligence, surveillance and reconnaissance assets."[122] This reversion is supported by the methods used to currently teach Intelligence Preparation of the Battlefield (IPB).

IPB is a process used to determine what information must be collected and which collection means are most appropriate to gather required information. The problem with IPB is that it is taught in a purely conventional context. Therefore, during low intensity operations, it is usually applied in a conventional approach. As such, intelligence collection is usually relegated to the use of conventional ISTAR platforms and technology. Consequently, the human and non-military dimensions are disregarded and the unique intelligence requirements of low intensity operations are not addressed.

There are many challenges to be overcome in order to deal with the unique intelligence demands of low intensity conflicts in the future. Predominant amongst these challenges is to resist the temptation to rely too much on new technology. Doing so may create critical vulnerabilities, which the belligerents may exploit. Wilson et al highlight this point: "Advanced technology warfare only seems to work when the enemy is willing to play the same game. It appears simply refusing to play can often negate it."[123] This statement does not mean to say that there is no place for technology in future low-intensity conflicts. Rather, technology should compliment the use of HUMINT and non-

[121] US Army, Intelligence and Electronic Warfare Support to Low Intensity Conflict Operations (Washington D.C.: Headquarters Dept of the Army, May 1993) pp 5-1 – 8-3.
[122] Charters, p. 51.
[123]Wilson, Bunkers and Sullivan, p. 3.

military sources of intelligence collection. To that end, technology can play a key role in information processing and dissemination.

The technological aspects of intelligence operations in future low-intensity conflicts should concentrate on analysis and dissemination rather than on collection. In this role, technology can be exploited to rapidly analyse and disseminate information, faster than humans can perform these functions. Further, there is a requirement for high technology ISTAR assets to provide forces engaged in low-intensity operations with a warfighting capability to deter and defend against escalated hostilities. The concept of fighting across the entire spectrum of conflict concurrently is raised by Hammes: "Fourth generation war will require much more intelligence gathering and analytical and dissemination capability…At the same time, the fact that fourth generation war will include elements of earlier generations of war means our forces must be prepared to deal with these aspects too."[124] In the future, intelligence capabilities must be flexible enough and structured so as to support conventional high-tech operations and at the same time provide for the unique requirements necessary to support low intensity conflict.

[124] Col T.X. Hammes, "The Evolution of War: The Fourth Generation," Marine Corps Gazette. Sept 1994. p. 44.

CONCLUSION

The intelligence dimension of armies involved in low intensity conflicts is multi-faceted and more complex than conventional operations. Intelligence operations must be designed and conducted distinct from conventional intelligence doctrine in order to address the unique intelligence requirements that low intensity conflict demands. These operations must embrace the themes of human intelligence and non-military sources of intelligence collection and avoid an over-reliance on technology. Currently, conventional ISTAR processes are inadequate to support present-day and future low intensity conflict as these conventional approaches disregard the unique aspects of low intensity conflict intelligence operations.

Intelligence operations since World War II reflect a transition in recognizing the unique aspects of intelligence in low intensity conflict. Beginning with Palestine, intelligence operations failed as a consequence of ignoring the human and non-military dimensions of low intensity conflicts and collecting intelligence along a conventional approach. Using the lessons learned from Palestine, the success of British intelligence operations in Malaya contributed to a successful counter-insurgency. During this counter-insurgency the collection of human intelligence through non-military sources was instrumental in contributing to the campaign's success. Paramount to this non-conventional approach was the establishment of intelligence cooperation between civil police, civilian authority and military forces. The British model in Malaya, however, was not incorporated by the US military in Vietnam.

The US military experience in Vietnam re-affirmed the consequences of basing low intensity conflict intelligence operations on a conventional military approach. Additionally, Vietnam serves to illustrate that technology alone cannot defeat an irregular force. This lesson serves as a warning to visions of a technologically reliant Army of the Future. Vietnam, however, may also serve as an operational scenario, with similar intelligence challenges to those found in future peace support operations.

Peace support operations call for many of the same unique intelligence requirements necessitated in counter-insurgency operations. The basic themes of emphasizing HUMINT and non-military intelligence sources apply extensively to peace support intelligence operations. In many cases, the military must take the initiative to establish non-military intelligence networks. Regular armies in peace support operations must be cautious of relying solely on high technology conventional intelligence collection systems at the expense of human intelligence and non-military sources of intelligence. The recognition of the perils of over-reliance on technology is especially significant for future peace support operations.

The major challenge for intelligence operations in future low-intensity conflicts is to not disregard the experiences from past counter-insurgency and peace support operations. The greatest temptation to resist is reliance on technology at the peril of ignoring the tenets of human intelligence and non-military sources of intelligence collection. Future armies must bear in mind that despite the promises of technology, wars and especially low-intensity conflict are human endeavors. As such, the human dimension themes of human intelligence and non-military sources of intelligence cannot be negated in favour of reliance on technology.

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