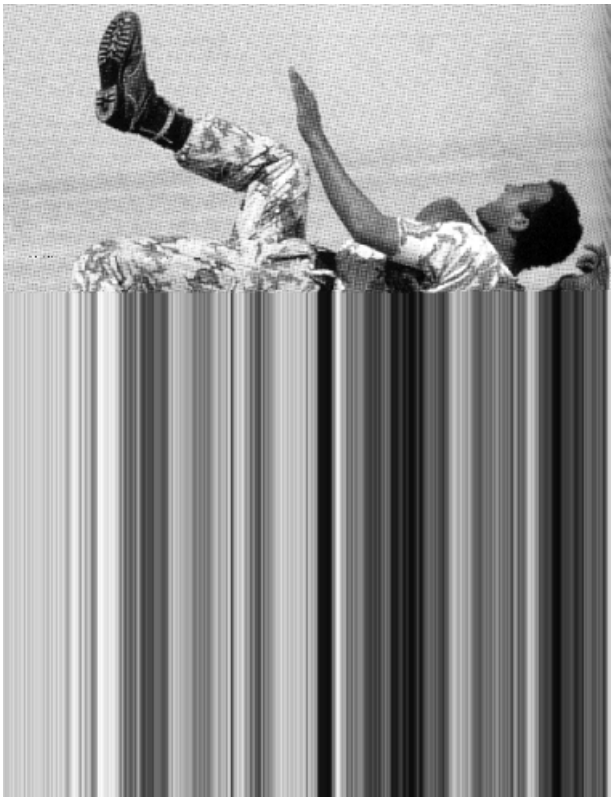
CANADIAN FORCES COLLEGE
CSC 29

Masters of Defence Studies Thesis

On Guard! Close Quarters Operations Training for the Canadian Forces

By Maj SM Nash



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AUTHOR'S NOTES

As an infantry officer, the Author has spent 18 years in the Canadian military with 13 years in 5 different line infantry units, mainly light and parachute forces. The Author has been a martial artist since 1980, a black-belt instructor in Shotokan Karate since 1984, and was graded to 4th degree black-belt in September 2002. The Author has been a qualified military unarmed combat instructor since 1989 and trained for 12 years with Anibal Lopes, a key figure in the Canadian Army's unarmed combat programme. As a military instructor, the Author has been employed as the lead instructor at 3 units: 2 RCR (1989 to 1992), Canadian Airborne Regt (1992 to 1994), and 1 RCR (2002 to 2002). Additionally, the Author has completed military unarmed combat courses with the British Army while on exchange with the Parachute Regiment and has participated in low-level combatives training at the US Army Ranger Training Brigade. Over the past three years, the Author has pursued and obtained some parallel civilian qualifications. Notably, he is a Defensive Tactics, Spontaneous Knife Defense and Violent Patient Student/Patient Instructor with Pressure Point Control Tactics. He has also done the basic Level 1 Tactics course with Compliance Direction Takedown and is presently pursuing further instruction and instructor status in this venue. While none of this training makes the Author a definitive source of any special or secret knowledge, it does, however, provide him with a certain level of experience and exhibits a certain level of interest to the topic study. Additionally, the Author has had the great pleasure of training with and learning from some exceptional people: military, civilian and academic.

As a light infantry specialist, the Author considers his forte as leading soldiers

under duress and strain in arduous conditions. He has always marveled at the soldiers' ability to do more than ever expected with proper motivation, training, and inspiration. The Author maintains a keen interest in the soldier as a human fighting/operational system and the techniques involved in accessing the amazing potential of the human system. Simultaneously, he believes that the human remains the key to military success. Despite any and all technological changes, the human processes for decision-making and task initiation/conduct remain the focal point for success, according to the Author. Further, he considers close quarters operations merely one important facet in the consideration of the human in conflict. Important and overlapping topics include leadership; combat shooting; and, virtually any tasks associated with the realities and stresses of combat.

THESIS ABSTRACT

Human conflict at near distance has been a significant feature of the human condition well before militaries or even warrior societies became established and accepted elements of early society. Despite its enduring presence and long history of influence, the issue of training for and operating in close, personal proximity to adversaries is not particularly well understood at many levels. While most militaries, past and present, understand intuitively the benefits of training for and conducting successful missions within close proximity of an enemy, many do not understand some of the key issues underlying success or failure.

From 1983 to 2002, the Canadian Forces implemented and supported a programme simply called Unarmed Combat. Even its title clearly defined the

fundamentals of the system – no firearms but designed for combat (read lethal) results. A descendant of certain elements of Canadian and allied military heritages, this programme was developed and designed to serve Canadian soldiers on missions in the context of the Cold War. When the Cold War came to a rather abrupt end in 1989/1990, the programme had only recently been instituted nationally and few saw any need to make changes. With a host of unexpected changes to the operational environment and an unprecedented pace of Canadian Forces deployments, both domestic and international, the Unarmed Combat programme was soon overcome by events and reality. For a variety of reasons, including a lack of 'free' time to consider such issues amid a hectic pace, the Canadian Forces close quarters system did not grow to meet the new challenges of the day. While many understood the system flaws and some initiated local programmes to fill the training gap, few, if any had the vision, the means, and the ability to affect the required evolutionary process to keep pace.

In 2001, the Directorate of Army Training did, however, recognize the state of the programme and its inherent inability to support operations for the present and immediate future, suspending any training under the 1983/1989 Unarmed Combat name and began in earnest to consider and re-create a more suitable system. As this paper is completed, the process of development is reaching the critical initial implementation stage after almost two years of groundwork and preparations. While this new system has made certain fundamental improvements, it may still be at risk of absorbing fatal flaws from the previous programme. The discussion covered in this paper is offered as further

background information and analysis for consideration in the development of a new close quarters system. While some of the recommendations may seem over the top or beyond the bounds of Canadian Forces costing and resource realities, each should be considered in detail before summary dismissal. While some might consider the high cost of creating the system recommended within the following pages as too much, this amount is likely rather paltry when considered against the cost of not properly preparing Canadian soldiers to conduct missions in support of Canadian sovereignty or interests abroad. As failure is not a seemly option, certain old ideas, concepts, and proverbial sacred cows may have to be overcome and undone.

Chapter 1

INTRODUCTION

From August to October 1989 Golf Company of the 2nd Battalion, The Royal Canadian Regiment (2 RCR) was deployed on Operation UNIQUE at Goose Bay, Labrador. This force of approximately one hundred soldiers was tasked to provide security to the Canadian Forces (CF) airfield that was host to several countries for NATO low-level flight training. The security threat came in the form of a series of protests by members of the nearby Innu native reservation at Sheshashit. Activities of note included several protests involving approximately twenty to eighty natives at any one time, generally accompanied by various Canadian and foreign media representatives. The crowds were generally mixed in age and gender and, despite a generally hostile nature, were consistently unarmed. Apart from the limited basic crowd control skills from the now defunct Base Defence Force duties programme, soldiers involved had no formal training on how to contain, escort, or control the protesters. Fortunately, few serious incidents occurred over Golf Company's mission duration; however, this was more likely due to good luck or mere coincidence than anything else. It is particularly important to consider the potential for disaster with unarmed Canadian men, women, and children being handled by largely untrained and unprepared Canadian soldiers under considerable stress in plain view of national and international media.[1]

From July to September 1990, 2 RCR took part in Operation SALON as part of 5 Canadian Mechanized Brigade Group. Deployed to the Khanawake Mohawk reservation south of Montreal, the Battalion was initially tasked to conduct intense training and to be

[1] Incident from the personal experience of the Author as a 2nd Lieutenant Platoon Commander. It is interesting to note that this mission began on his 2nd day at 2 RCR.

prepared to remove native barricades, by force if necessary, in a nationally and internationally monitored event. After some considerable tension, the barricades were removed and the Battalion took on the unexpected role of policing and patrolling inside the reservation. During this time, elements of 2 RCR participated in several key operations, including the Long House Raid, the Tekawetha Island Raid, and several riot/crowd confrontation situations. Prior to departing its home at Canadian Forces Base (CFB) Gagetown, 2 RCR was not permitted to conduct any crowd control training, as R.C.M.P. and other police agencies would be tasked to deal with such events. Likewise, it did not conduct any unarmed combat training, rather preparing for its mission with section, platoon, and company live fire attacks. As the barricades came down, certain elements of the unit were able to conduct limited unarmed combat training. The Author was tasked to conduct training for Golf Company at Farnham and St. Denis and Master Corporal Dan Labelle was tasked to conduct similar training with Hotel Company at Farnham. In both cases, despite best efforts, the training was largely token, was based on the war-fighting skills from the unarmed combat system in use at the time, and did not appreciably add to the performance capabilities of any soldiers involved. As in the Goose Bay example, the soldiers were very fortunate indeed and, despite some very tense incidents and life-threatening situations, there was no catastrophic failure due to lack of proper skills for the task.[2]

From July 1999 until February 2000, the 1st Battalion, The Royal Canadian Regiment (1 RCR) was tasked to NATO duty in Kosovo. During the mission, the unit

[2] Information taken from Author's personal experience and from discussion and a written synopsis from WO (Retired) Dan Labelle, submitted 11 March 2003. Also, Major John Fife, a platoon commander with Hotel Company for the operation witnessed the injury of several civilians and soldiers during the Tekawetha Island Raid. He believes that these injuries could have been prevented had the soldiers been better trained for operations at close quarters prior to the mission.

was tasked to support operations at the bridge at Mitrovica where an angry crowd of several thousand people gathered. Arriving with his company on short notice, Dan Labelle, now a Warrant Officer, was tasked to provide unarmed combat training to his company's soldiers before they moved to the bridge. Warrant Officer Labelle was given approximately five minutes to train previously untrained soldiers at a location within one hundred and fifty metres of the riot site. Again, Canadian soldiers were fortuitous in the event outcome and did not pay the full price for lack of suitable training and preparation for operations at close quarters.[3]

Each of the three events outlined above may seem rather innocuous but they point out a theme that the Author feels could be extrapolated to dozens of other missions by CF units over the last 10 to 15 years. The common thread for all would be a lack of proper training for tasks in close proximity of others to allow soldiers to protect themselves and complete their missions in the face of various forms of aggression and conflict. As these events and others did not prove catastrophic, there was little impetus to change and/or develop the ailing CF unarmed combat programme in use from 1983 until 2002. Even the use of force issues clearly raised during the investigation of the death of Shidane Arone while in the custody of Canadian Airborne Regiment soldiers in Somalia in March 1993 did not create sufficient impetus to change the unarmed combat training programme dealing with such related issues.[4]

The unarmed combat programme in use (or not in use, depending on how you look at it) for all the above incidents was created in 1983 in the Special Service Force

[3] Warrant Officer (Retired) Dan Labelle, ibid.

[4] While the main issue here could likely be argued as leadership in the Airborne Regiment, there are clearly some links with securing and close care of prisoners and our topic of close quarters operations.

(SSF) at CFB Petawawa and became a national level programme in 1989.[5] While the specifics of the programme will be described in more detail later in the paper, suffice to say that the programme was not successfully implemented at many levels. Realization and acceptance of the flaws of the system was confirmed in January 2001 when the Directorate of Army Training (DAT) took action and imposed a CF-wide ban on the conduct of all Unarmed Combat Training.[6] Further, in June 2001, DAT followed up stating, "The present qualification standard is outdated and requires considerable change to meet today's operational requirements."[7] Acknowledging DAT's stated requirement for change from the 1983/1989 CF Unarmed Combat Programme as a starting point, this paper will confirm that this programme no longer meets the requirements of the CF and a new system must be implemented within the CF. The discussion will review the entire issue in some detail with the purpose of outlining where the present system went wrong and, to be fair, where it may have gone right. Additionally, a proposal for future development of a close quarters training system to support CF operations will be forwarded.

This discussion will begin with some key definitions and a more precise naming of our topic followed by some required historical context. This historical information will establish key links between warfare/conflict in general as well as the usefulness and application of close fighting systems. Next, a more detailed look at the 1983/1989 Unarmed Combat package will be reviewed and considered with regard to operational

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[5] SPECIAL SERVICE FORCE UNARMED COMBAT, (S.S.F. Headquarters, C.F.B. Petawawa, Ontario: 6 September 1983).
and
B-GL-318-018//PT-001 – Canadian Forces Close Quarter Combat Manual, DND, 1989.

[6] Memorandum 1006-1(DAT 3-6) dated 25 June 2001.

[7] Ibid.

requirements. At the same time the operational environment of the recent past, present, and foreseeable future will help to answer the question of just what the CF is trying to plan and train for with any proposed programme. From here, the discussion will review a number of systems employed by various armed forces, including our own, over the last 30 years, in order to better understand the context of parallel developments and to establish any commonality of system themes and evolutions. In order to make best use of all available sources within reason, some notable civilian systems will also be considered. Next, the paper will outline some key themes and requirements based on the basic questions 'who, what when where, and why'. These themes and requirements will then be considered with regard to a new system that DAT is presently developing and implementing, as of March 2003. By considering the initial recommendations of this paper with the latest system update, the reader should perceive a delta; that is, certain fundamental issues that may be missing from even the latest programme update. Next, some additional suggestions for consideration in the ongoing development of the programme will be made in an attempt to take the package to a new level. The discussion will then close with a summary of findings and concluding remarks.

In order to better set the stage for discussion, some ground-rule definitions must be clarified. The first term of some issue is 'unarmed combat'. Also called 'hand-to-hand combat', the implication of either phrase is the close interaction of one soldier with another (or in small groups as part of a larger operation) in some form of adversarial situation. As we shall discover later in the paper, the interaction(s) may not involve combat; therefore, the more appropriate term 'operations', which can be of any nature, is recommended and will be generally used throughout. Likewise, "unarmed" does not

always accurately describe the reality of training or intended use of the programme skills. While the term does imply to non-use or non-availability of lethal projectile-firing systems like assault rifles or pistols, it can be misleading when training involves the use of knives or bayonets, for example. Therefore ‘close quarters’, denoting the key element of proximity between soldier ‘A’ and potential or confirmed opponent ‘B’, is more suitable and will be used throughout to form the term ‘close quarters operations’. Generally, approximately eighty feet or twenty-five metres is considered to be close quarters. This distance should immediately indicate relevance to a variety of related environments with reduced engagement distances, such as urban and jungle settings, for example. Having outlined our discussion in the term ‘close quarters operations’, one more limitation should be clear. Close quarters operations could also include unarmed encounters; restraints (handcuffing, immediate securing, etc); use of bayonet, knife, improvised weapons, weapons of opportunity, and batons; crowd control; and, tactical shooting. While there are certainly direct links for consideration of all these topics and more, this paper will not discuss, due to time and space considerations, the latter two topics – crowd control and tactical shooting. The discussion will however span the remaining topics as required and much of the presented material can be extrapolated to further, wider discussion.

Chapter 2

HISTORICAL CONTEXT

In order to provide some important context for present and future close quarters operations, a summary of salient historic events and concepts will be considered. While the discussion will be rather brief and will likely miss some potentially valuable events or ideas in the name of space, it should decisively outline two points that are key to our overall discussion – one, that warfare and conflict are a definitive part of the human existence; and, two, that close quarter operations have a role to play in all methodologies of engagement. The historical consideration will be broken down into 3 separate areas: early history to the 15th century, labeled the close quarters era; the 15th century to the end of the 19th century, labeled the projectiles era; and the turn of the 20th century to the end of World War II, labeled the modern technological era. The era beyond World War II will be discussed later in the paper at various locations.

The Close Quarters Era

Some of the earliest cave drawings are known to depict basic forms of clan and tribal conflict. These initial references highlight the Author's designation of this time period as the "close quarters era", as virtually all fighting was conducted within close proximity of an adversary since primitive weapons and projectile systems limited the distance over which force or the threat of force might be carried. Somewhere around 3500 BC, the discovery of bronze led to a new wave of implements useful for warfare, especially the enhancement of primitive edged weapons. Out of Biblical context comes the slaying of Goliath by David in a close quarters event with a primitive slingshot and a

particularly nasty rock to the head. Around 2000 BC, Babylonian artists produced works that depicted forms of early unarmed combative systems. Meanwhile, the ancestor of the modern horse was just being domesticated and would become a key component in various empires based on the chariot.[8] However, due to the limited projectile capability[9], the chariot could only realistically be described and used as a portable close quarters system. Meanwhile, during this timeframe, the importance of the protection of growing trade routes and increasingly profitable territories saw the development of a warrior class as the subject matter experts for defensive and offensive operations in support of, or as, the ruling class.

During this era each and every warrior was focused on close quarters combat as twenty-five metres was usually at the edge of the reach of his weapons and basic military concepts. The heavy Greek infantry phalanx soon dominated the battlefield as it provided a concentrated mass of close quarters warriors that could withstand assaults from disorganized mobs or could be launched at similar bodies as a test of training and discipline.[10] Meanwhile the warrior class remained linked, sometimes inseparably, to the

[8] Ron Shillingford, The Elite Forces Handbook of Unarmed Combat, (Dunne Thomas Books: New York, 2000), pp. 7-8.
and
John Keegan and Richard Holmes, Soldiers: A History of Men in Battle, (Elisabeth Sifton Books: New York, 1985), pp. 11, 22.

[9] At this time, the primitive bow and arrow or spear could only be launched over a short distance. Additionally, most such efforts were difficult and highly inaccurate when attempted on the move in a primitive moving vehicle, the chariot.

[10] The Ancient Greeks also practiced a form of unarmed fighting called 'pankration', which involved punching, kicking and throws. As a form of military training and an original Olympic sport in the 4th century BC, it was a precursor to modern close quarters programmes. Of note, modern forms of pankration are gaining commercial/civilian popularity and attempts are underway for the ancient fighting art to return as an Olympic sport. James L. Steffensen, "Ancient Greece", The Universal History of the World, Vol 2, 1966, pp. 151-152. and discussion with Steven D. Litnas, Pankration Instructor, Toronto, Ontario, December 2002.

ruling class and warfare maintained its close link to society as a whole.[11] By 1000 BC, iron had been discovered to improve close weaponry and by 600 BC horse stock had evolved to allow a rider, albeit without the control of stirrups for the time being.[12] As an example of the power of the organized and disciplined close quarters warriors, Alexander's Macedonian phalanx-based army of 30 000 soundly routed the light cavalry-based forces of the Persian, some 600 000 strong, at Issus in 333 BC. [13]

Figure 2.1 – Bronze statue of a Greek heavy infantryman (hoplite) from around 520 BC

[14]

Even the post-Greek empire of Rome, vested as it was with the luxury of incoming new technologies brought by military victories, still relied on the training and discipline of its heavy infantry cohorts and its shock heavy cavalry to break the enemy at

[11] General Sir John Hackett, The Profession of Arms, (Sidgwick & Jackson: London, 1983), pp. 13, 15.

[12] Keegan and Holmes, p. 12.

[13] Rex Applegate, Riot Control – Materiel and Techniques, (Stackpole Books: Harrisburg, 1969), p. 20.

[14] Hackett, p. 12.

the closest of quarters.[15] Of note from the Roman context, the main focus of the relatively sophisticated and well orchestrated legion battle was the maneuvering of the heavy infantry to a distance of just inside thirty metres, where they threw one or two heavy javelins and then closed to break or destroy the enemy a short sword distance.[16] The should be no doubt that "hand-to-hand fighting was physically very fatiguing and emotionally stressful"[17] and that it featured exhausting muscular effort, generally in short, intense bouts of combat.[18]

After the reduction and end of Rome's military supremacy, Western military and social innovation was stunted to a considerable extent for several hundred years. However, local warlords and warrior communities showed some signs of progress. Of note various Slavic communities of the 6th to 9th centuries developed indigenous close combat systems that can be traced in some form or other to more modern methods and arts.[19] As Europe and the Western world crawled from under the cloak of the Dark Ages, up sprang the dominance of the feudal knight and an entire supporting system. Despite loose organization into groups and what might be considered armies, these warriors generally fought in a thoroughly individualistic way. Hoping to catch a suitable foe unawares, the feudal knight on his warhorse generally fought for booty and ransom at close quarters. His sword, lance, mace and other battle accouterments were all clearly designed for action in immediate proximity to an enemy.[20] Interestingly, the advent of

[15] Hackett, p. 22.
[16] Adrian Goldsworthy, Roman Warfare, (Cassell & Company: London, 2002), pp. 56-57. Early catapult-type launchers and other siege devises were know at this time. Although they did add to the order of battle, they did not replace the heavy infantry and heavy cavalry as the basis for Roman military might.
[17] Ibid., p. 57.
[18] Keegan and Holmes, p. 24.
[19] Shillingford, p. 21.
[20] Hackett, p. 25, 28.

projectile weapons was slowed by such edicts as the 2nd Latern Council of 1139, which forbade the use of crossbows as 'barbarous' devices.[21]

The Projectile Era

The decline of what the Author describes as the era of close quarters (and not much else), began in earnest at the Battle of Crecy in 1346 as Edward III routed Philip VI. Here the English longbow, with its superior penetrating power over 300 metres distance, out performed the French crossbows and killed the flower of French knighthood well beyond close quarters range. As a definitive end to the close quarters era, another interesting turn of events for the concepts of warfare also occurred over the next hundred years. By 1364 the first crude firearms appeared in their initial unreliable and somewhat suspect fashion. Soon, however, firearms and cannon were gaining dominance on the battlefield. [22]

As projectile weapons developed, several treatises of unarmed combat appeared across Europe. Notable accounts in 1410 and 1423 provided some form of alternate action required when the unreliable firearms ceased to fire or ammunition was no longer available.[23] The bayonet itself was developed and became common issue over the next 200 years. Most accounts site its creation near the French village of Bayonne as one of a group of musketeers surrounded by Spanish cavalry decided to stick a knife into an empty musket barrel for defense.[24] By 1647 several bayonet styles were available, by 1696 it was on general issue in many armies and by 1700 it had been transformed from a

[21] Ibid., p. 28.
[22] Ibid., pp. 37, 56-57.
[23] Shillingford, pp. 9-10.
[24] Tim Ripley, Bayonet Battle, (Sidgwick & Jackson: London, 1999), p. 2.

plug-type to a socket and ring-type which allowed the user to fire his weapon with bayonet in place.[25]

While the bayonet really allowed a musketeer to act as a part time pikeman, it also ensured the availability of close quarters weaponry when either side breached the projectile distance. Unarmed and stick fighting précis were produced 1559, 1617, 1625 and 1626.[26] Interestingly, while the concepts of the feudal knight generally meant that loss of sword or weapon in hand was generally followed by submission and a finish to the battle, the newer version of warfare extended across projectile range and was also backed up by close quarter means.[27] From the 16th to 19th centuries this was to remain relatively constant. Even the massed battles of the Napoleonic Wars saw the combination of massed firepower of muskets, rifles, and cannon, flexibility of the cavalry charge, and the close battle of the bayonet and sword. The survivability of a disciplined British square against infantry and artillery projectile and cavalry shock action is an excellent example of close quarters battle skills in the early 19th century.

The Technological/Modern Era

By the time the American Civil War ended in 1865[28], several technological changes were about to usher in what might best be described as the technical/modern era. Gatling's early version of the machine gun was a bleak foreshadow of what would arrive to change the face of warfare at the outbreak of World War I. Despite enthusiastic talk of

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[25] Hackett, p. 83.
and
Ripley, p. 3.
[26] Harry Cook, "Stick Fighting in the British Isles," Dragon Times, Volume 20, p. 5.
[27] Arthur Wise, The History and Art of Personal Combat, (Hugh Evelyn: London, 1971), p. 242.

[28] Note that at least one source mentions after action style reports from the Civil War era recommending more training for close combat operations. Clark, p. 30.

élan and esprit de corps as well as rigorous bayonet training as crucial battle winning elements, the deaths of millions of soldiers from both sides due to machine gun and artillery fire in World War I posed a considerable obstacle to the concepts of close quarters operations, during and after the war. Of note, Comrade Lenin, at the head of the fledgling Soviet state, enlisted a study from 1918 until 1920 to consider as many differing indigenous and foreign fighting arts as possible in building a close quarters system that could provide an advantage in training a superior Soviet soldier for the technical/modern era battlefield.[29]

British and American armies saw little development of close quarters systems after 1918 as the general desire for and acceptance of conflict had subsided with the recent tumultuous four year struggle. In fact, it is not until the outbreak of World War II that any real effort seemed to be expended on the issue. By 1941, four key figures had emerged in Britain and the United States of America, three of whom would provide the foundations for much of the military close quarters skills implemented by the West until at least the turn of the 21st century. Charles Nelson of the United States Marine Corps (USMC) was a key close quarter specialist and innovator from the Pacific/China region. While he would take the lead in many aspects of the USMC close quarters programme, his influence was not as profound or as well documented as that of the following three personalities.

Rex Applegate, an avid hunter, expert marksman, and son of a professional police officer, graduated from the Reserve Officer Training Corps programme at Oregon University and was commissioned into the 209th Military Police Company in 1940. When America entered World War II in December 1941, Applegate was employed helping to

[29] Shillingford, p. 21.

set up and instruct at "schools for close combat fighting with and without weapons".[30] Additionally, he became a key figure in developing and creating the training and clandestine missions of the renowned Office of Strategic Services (likely better known as simply the OSS). During an extensive career as a training advisor and instructor, Applegate wrote several key works on close quarters combat, riot control, and patrolling. One of his main focuses for training was an understanding and acceptance of the fundamental differences between close quarters combat, self-defense, and sport. The first employed for seeking and destroying an adversary outright, the second employed for defense after avoiding a confrontation, and the third employed for athletic and competitive development (but without the life and death issues of the other two). Until his death in 1998, Rex Applegate remained a key figure in American close combat and police/security circles and his influence extends to many of today's systems.[31]

William Ewart Fairbairn served with the Shanghai Police for some 20 years and was Assistant Commissioner and Head of Riot Police for the force in 1940 when he was recalled to active service with British forces in the rank of Captain. Considered by most an unarmed and knife fighting expert, he was the first foreigner living outside Japan to be granted a black-belt in Ju Jutsu (an art of throws, pressure points and lethal strikes). William (Dan) Sykes was a close friend of Fairbairn's and served as Head of the Sniper Unit and Chief Fire Arms Instructor with the same Shanghai force. He was also commissioned into the British Army and, along with Fairbairn, was a key figure in the development and instruction of Britain's close quarters and special operations

[30] Shillingford, p. 11.
[31] Ibid., pp. 11-12.

programmes. [32] Both men were avid supporters of knife fighting as an essential close quarters skill. As Fairbairn surmised, "at close quarters, there is no more deadly weapon that the knife…and it never runs out of ammunition"[33]. Fairbairn and Sykes also cooperated in the publication of several manuals and books. In *All In Fighting*, Fairbairn underlined a key and enduring aspect of close quarters operations:

> *Some readers might be appalled at the suggestion that it should be necessary for soldiers of the twentieth century to revert to the grim brutality of the Stone Age in order to be able to live…killing with the bare hands at close quarters savours too much of pure savagery for most people…When it is a matter of life or death, not only of the individual but indeed of the nation, squeamish scruples are out of place.*[34]

Together with Nelson and Applegate, Fairbairn and Sykes played a large role in the development of close quarter systems for use in World War II and beyond. One common feature of their application was the clear emphasis on no-holds-barred decisive action likely brought about by the reality of the monumental struggle of forces during the Second World War.

Another feature worth noting was that each of the close quarters pioneers understood the particular place of close quarters operations among the lethal and far reaching capabilities of the technological/modern era. While some basic forms of close and/or unarmed combat were taught to the average fighting soldier, the most specialized training was limited to elite and special operations units. The Canadian Army of 1941/42 provides an excellent example here and a review of the 1941 Canadian Army training

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[32] Roger Ford and Tim Ripley, The Whites of Their Eyes, (Brassey's: Washington, D.C.: 2001), pp. 133-134.
and
Dave Cater, "Tackling Terror Head On," AMERICA STIRKES BACK, November 2002, pp. 2-3.

[33] Ford and Ripley, ibid. The reader may be aware of one of the other claims to fame of the pair of instructors, the Fairbairn-Sykes commando fighting knife.

[34] Ibid., p. 139.

pamphlet simply titled *Unarmed Combat* provides some interesting points. First, the manual is very clear that the prescribed training should "inculcate that spirit of self-defence, initiative and determination so necessary to the soldier" and allow him to use offensive and defensive moves in combination to achieve the upper hand on his foe.[35] Further, underlining the crux of the matter similar to Fairbairn (who may have helped to draft or edit this version), the manual reminds us that

> *War is a matter of life and death, even where unarmed combat is concerned; hence there must be no scruple or compunction over the methods employed. Complete ruthlessness is necessary in order to gain mastery over one's opponent.*[36]

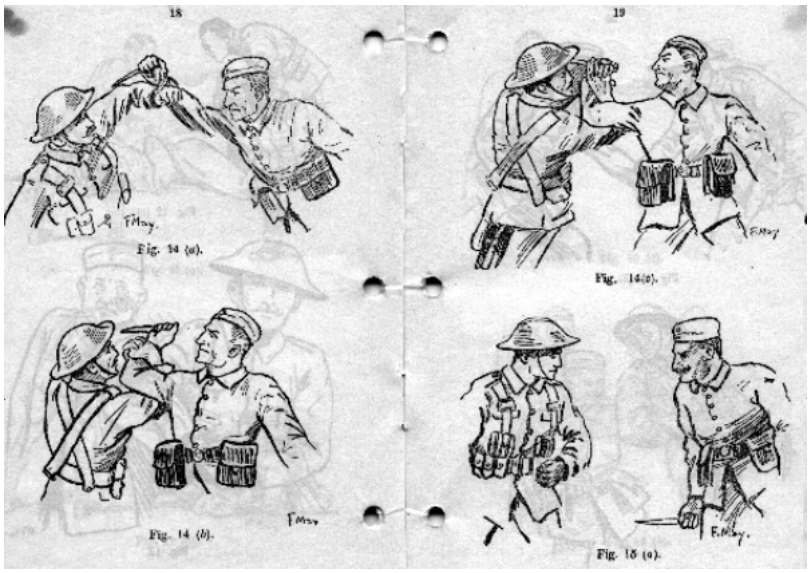

Figure 2.2 – Knife Fighting techniques from 1941 Canadian Army Unarmed Combat manual

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hin in size and content and actually portrays many of its examples in World War I style battledress and equipment. While its simple techniques may have been effective, the dozen or so techniques included are an example of the lack of emphasis of such skills for the bulk of regular forces.[38]

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[35] Unarmed Combat, Edmond Clouthier: Ottawa, 1941, p. 1.
[36] Ibid.
[37] Ibid., pp. 18-19.
[38] Ibid., p. 2. Despite a criticism of a certain lack of originality, this manual did rightly articulate that for the soldier "no two attacks or opponents are the same, but practice builds a variety of useful techniques at his command". This topic will appear again in the section on Motor Learning and the Human System.

On the other hand, there is the example of the more rigorous and better-developed programme of the First Special Service Force (FSSF), a unique joint Canadian-American force that was also known as the 'Devil's Brigade'.[39] A highly-trained specialist light infantry force, the Devil's Brigade claimed a very arduous fitness and training programme that included at least two special features: "parachute training and hand-to-hand combat served to cement an attitude of recklessness, daring and aggression within the force".[40] While boxing was popular and useful training, it was Irish-Canadian instructor Patrick O'Neill who taught a combination of "karate, ju jutsu and trick fighting"[41], differentiating the FSSF training from that conducted by regular forces. Additionally, confidence was such that bayonet and knife fighting drills were performed with live (bare) blades. Also, of note, the programme was specifically designed for all personnel of any trade and/or rank. FSSF commander Robert Frederick was a noted and common participant in the ongoing close quarters training. This latter feature, promoting an increased sense of unit confidence and cohesion, will be mentioned again later.[42]

The Special Case of Japan

Noting that most of our historic context is limited to what is considered the Western world, an important foray must be undertaken before leaving this portion. While there are numerous potential important examples of close quarters operations from other than the West, this discussion will focus on one specific area – Japan. Several special

[39] Interestingly, this force was the forefather of the Special Service Force that existed at Canadian Forces Base Petawawa from 1978 to 1995.

[40] Major Scott R. Mc Michael, A Historical Perspective on Light Infantry, (U.S. Army Command and General Staff College: Fort Leavenworth, 1987), p. 173.

[41] Ibid., pp. 172-173.

[42] Ibid.

features will become apparent in this area of consideration – namely the unique nature of Japan's military history and its influence on numerous national, civilian, and military close quarters systems.

While Japanese warring history extends back some thousand years, the primary focus here will be from the end of the 16th century until World War II and will consider three areas: the social-military structure, the warrior class, and the close quarters battle arts. First, Japan saw an almost unending bout of warfare for almost 200 years prior to 1600 as generation after generation fought an internal struggle for power and control. The Battle of Sekigahara in 1600 saw total victory for Ieyasu Tokugawa and the establishment of the Tokugawa Shogunate[43], which would last until 1868. For 267 years the country was run by a military governmental system that supported and ensured the supremacy of the warrior class in all aspects of Japanese society.[44]

Without constant battles to fight, the life of the Japanese warrior, the samurai, was carefully regulated in order to maintain the fighting edge required to face battle and death. Tsunetomo Yamamoto, a samurai who was allowed to retire as a cave-dwelling monk in 1710, underlines the stern warrior ethic of the samurai with the following advice:

> *Meditation on inevitable death should be performed daily. Every day when one's body and mind are at peace, one should meditate upon being ripped apart by arrows, rifles, spears, swords, being carried away by surging waves, being thrown into the midst of a great fire, being struck by lightning, being shaken to death by a great earthquake, falling from thousand-foot cliffs, dying of disease or*

[43] 'Shogun' refers to the position held by Tokugawa, that of supreme generalissimo.

[44] Oscar Ratti and Adele Westbrook, Secrets of the Samurai – The Martial Arts of Feudal Japan, (Castle Books: Edison, NJ, 1999), pp. 15, 24.
and
Reverend T Lindsay and Jigoro Kano, "Jujutsu – The Old Samurai Art of Fighting Without Weapons, Part I". Reprinted from 1888 original in Dragon Times, Volume 20. pp. 31-32.

committing seppuku at the death of one's master. And every day one should consider himself as dead.[45]

Yamamoto's advice should indeed confirm the stark realities of the Japanese concepts of war. Also of note are two other features of the samurai. First, he was in all senses a professional warrior. While feudal European knights waged war according to rather limited calendar requirements with their local lord, the samurai had no other duty than to fight, kill, and die for his liege lord. This produced a certain penchant for developing all facets of fighting which might make the European knight an "amateur" by comparison.[46] Noting earlier that the European knight might be considered vanquished if he lost his sword or main armament, the samurai was bound to fight with any and all means until dead or victorious.[47]

Due to the lack of other preoccupations and the responsibility to fight on regardless, the samurai generally had considerable knowledge of a wide variety of fighting skills. Much like the European knight however the samurai's battle was largely an individual one in close contact with his adversaries. During the Tokugawa period, training was taken to a new level as each endeavour had a strict ritualization, creating an 'art' of 'bushi-do', literally the 'Way of the Warrior'. While the list of training arts is considerable, the main weapons components involved bow, sword, spear, fan, staff, and chain. Unarmed systems were called various names but included at least twenty-seven major aspects focusing on sumo (wrestling/grappling), ju jutsu (pressure points), aikido

[45] Yamamoto Tsunetomo, (translated by William Scott Wilson), HAGAKURE: The Book of the Samurai, (Kodansha: New York, 1979), p. 164. Note that 'seppuku" is the ritual suicide of a warrior by self-disembowelment with a short sword.

[46] Wise, pp. 241-242.

[47] Ratti and Westbrook, p. 418.

(energy transfer and throws), and karate (kicking, punching, striking).[48] Two final aspects of note for the development of close quarter arts were the self-imposed isolation of Japan and the national ban on firearms that lasted for over 200 years. The former left Japan alone for the most part to concentrate on its unique national development of the warrior as a spiritual and physical force while the latter removed some of the impetus for change due to the firearms projectiles as seen in the Western context.

In 1867 the Tokugawa reign ended and was replaced by the Meiji Restoration, which saw the renewed power and reverence of the Emperor. Despite these changes, largely brought about by forced contact with the West, Japan did not easily lose its feudal legacy. To put this into a relatively simple context, imagine if European knights wore swords and dominated all aspects of society up to 1867, as the samurai did. The feudal warrior's code of single-minded purpose in the service of his lord, his unquestioning obedience, frugal living, and imperviousness to pain, discomfort and der9Aoulved e obeth e

development as "masters of individual combat"[51] and as well as recognize their enduring effect on innumerable close quarters systems.

Historical Summary

Ending the historical portion, it should be reasonably clear how the development of warfare progressed, in a general sense, through three eras: the close quarter era which was defined by virtually all activities within the twenty-five metre radius; the projectile era which was defined by the introduction of weapons which extended lethal ranges beyond close quarter; and, the technological/modern era which was defined by the quantum leap in ranges, rates, and lethality of weapon systems. The common theme of greatest import for this discussion, however, is the development and amendments to close quarter systems that have kept various components relevant through each era, and, indeed, across the eras. A second theme should also be clear; that is the penchant of mankind for conflict and fighting. General Sir John Hackett summarized it nicely with "Man being what he is…conflict will continue. It is hard to conceive a future with no fighting."[52] Having determined that conflict will likely be a part of our future and that close quarters operations will likely form part of the spectrum of activities, this discussion can proceed with some surety of relevance. Additionally, some of the close quarters themes validated throughout the history of war and combat will be encountered again.

[51] Ibid., p. 29.
[52] Hackett, p. 7.

Chapter 3

OPERATIONAL ENVIRONMENT

Having considered some key issues of historical context, the discussion will now move to the important contemplation of the environment in which the CF intends to operate in the present and near future. However, in order to understand both the fundamental and the more subtle changes to the operational environment, a short foray into the recent past will take place. From the end of World War II until 1989 a single issue called the Cold War dominated much of the world. Staging the world's superpowers, the Soviet Union and the United States of America, in a relatively equal but diametric position of opposition, the Cold War influenced the behaviours and activities of the world's military forces, including Canada's. With each country of the world essentially supporting one of the two opposing camps, most if not all viewpoints and stances were bi-polar in nature. That is to say, in a simplified sense, if one supported the Soviets, one automatically opposed the Americans and vice versa. In the Cold War world, certain issues were taken for granted. For example, from the American perspective, nuclear weapons poised for mutually assured destruction were considered a necessary peace measure; war in Vietnam was considered necessary to prevent communist domination of the area; and, forces had to always be ready to fight to stem the tide of the Soviet hordes. It is this latter issue that dominated much of the West's training practices and preparations for war-fighting, including much of the basis of the 1983/1989 CF Unarmed Combat programme.

The 1983/1989 Unarmed Combat Programme

As alluded to in the introduction, the present programme dealing with close quarter operations is based on the manual titled *Special Service Force Unarmed Combat* and issued on 6 September 1983. This manual was authorized and approved by the Commander of the Special Service Force (SSF) stationed at CFB Petawawa.

Figure 3.1 –
1983 S.S.F. Unarmed Combat Manual front cover

[53]

An important common theme of close quarters training as a whole suggests:

> *The Quality and quantity of training varies tremendously between forces and individual units, often being dependent on the skills of certain personnel and their willingness to impart their knowledge.*[54]

Indeed, the 1983 S.S.F. programme was really the product of the efforts of a few key players. One such player was Major W.J. Soucie, Officer Commanding of E Battery (Para), 2nd Regiment of Royal Canadian Horse Artillery, who supported the new programme and signed the document for the SSF Commander. The other key personality was Anibal Lopes, a signals soldier who was also a highly skilled karate practitioner and

[53] Special Service Force Unarmed Combat Manual, front cover.
[54] Shillingford, p. 11. This feature is particularly relevant to the CF system as viewed, supported, and endured by the Author who has attempted to revitalize and/or create close quarters training at five separate infantry units, with varied results and interest.

instructor[55]. While Major Soucie provided a training area equipped with a boxing ring in his sub-unit lines, it was Lopes who did much of the demonstration and instruction for the programme in Petawawa.[56]

The introductory memorandum to the manual provided background details for training as follows:

a. the recognized need throughout the army for unarmed combat training,

b. the failure of past systems mainly due to their judo-based approach which required "extensive facilities", "caused many injuries" and "seemed virtually ineffective at the basic level",

c. the basis of the new system on Japanese Karate which required "no special facilities", could "be incorporated into unit PT programmes", and had "little risk of injury" if properly supervised,

d. the potential for the quick acquisition of self-confidence and immediate progress as well as "seemingly unlimited potential",

e. the programme/training benefits to include effective fighters, increased aggressiveness and willingness to fight, plus increased unit cohesiveness and morale,

f. the link to "combative skills developed by the US and British armies",

g. the requirement for qualified instructors to complete an eighty hour course,

[55] Anibal Lopes joined the military in 1980 and retired in 2002in the rank of Master Warrant Officer. On enlistment he was already a black belt in Shotokan karate and was an active competitor at the provincial and national levels. At the time of writing, he continues to train and was awarded the rank of 6th degree black belt in 2000.

[56] As a student of Anibal Lopes from 1980 until 1992, the Author trained several times in the E Battery lines. Also note that most of the photos from the SSF Manual portray Lopes demonstrating techniques.

h. the recommendation to maintain training throughout the year, ideally three hours per week,

i. the recommendation that the programme "should be taught in the same manner as foot drill", insisting on 'individual attention and discipline",[57]

j. the emphasis on enthusiastic support and the submission of recommended changes for programme success. [58]

While some of these points will be revisited later, the programme was not particularly flawed in any way, but did have a few other notable features. A review of US Army manual *FM 21-150 Combatives-71* (*Combatives-71*)[59] listed in the references would provide a remarkably similar programme. Like the American version and reminiscent of Fairbairn's earlier comments, the manual clearly emphasizes "Since your life is at stake, you should forget the concept of fair play, and attack these vulnerable points."[60] One interesting difference is that the US manual suggested that the movements should not become rote drills, like parade square activities, contrary to sub-paragraph 'i' above. Overall, with a basis on *Combatives-71* the implementation of the programme was clearly a reflection of the personality and talents of Anibal Lopes.

After a number of years of implementation and use, a second updated version of the SSF manual was produced in 1988.[61] This version did not; however, have any covering memorandum with implementation authority. While the photographs and text

[57] This issue will appear again as the context here is opposite to the text and meaning contained in *Combatives-71* as well as the requirement for diversity and randomness in training outlined in the section on Motor Learning and the Human System.

[58] Special Service Force Unarmed Combat, Covering Memo pp. 1-3.

[59] U.S. Army Field Manual 21-150 Combatives. Dated December 1971. Note that Cater, p. 2 defines 'combatives' as a martial art derived specifically for military, law enforcement or security personnel.

[60] Ibid., p. 13-1.

[61] Lopes, Anibal. Unarmed Combat Manual. Undated but produced in 1988. From the Author's collection as presented to him by Lopes in 1988.

were updated to some extent, the manual's general print quality was somewhat lower than the 1983 SSF version. Interestingly, it was this second version that became the basis for the official *Canadian Forces Unarmed Combat Manual, B-GL-318-018, PT-001* produced in 1989. Added to the 1989 version was a chapter on Bayonet Fighting taken from the Canadian Infantry Small Arms Instructor training package from the Combat Training Centre at CFB Gagetown. The programme was then distributed across the CF with Unarmed Combat Instructors' Courses being taught at the infantry regimental battle schools.[62] Most of the techniques and training context remained essentially unchanged from the initial SSF manual with a clear focus on the "seek and destroy" aspects of close quarter operations discussed by the likes of Fairbairn, Sykes, and Applegate and supported in the Cold War context.

While this aggressive stance in close quarters operations seemed rather apropos at the time of its inception, this context soon changed. Shortly after the production and distribution of the 1989 Canadian Forces manual, the unforeseen events of the dismantling of the Berlin Wall and the collapse/disappearance of the Soviet Union and Warsaw Pact dramatically changed the context of the world stage. While few could have forecasted the occurrence and the lasting effects of the end of the Cold War, the search for the elusive 'peace dividend' soon took on a life of its own.[63]

[62] These schools were located at CFB Petawawa for the Royal Canadian Regiment, CFB Wainwright for the Princess Patricia's Canadian Light Infantry, and CFB Valcartier for the Royal 22nd Regiment. These schools were later changed to Area Training Centres with much the same mandate. While 2 remained in the same locations, the RCR battle school moved to Meaford.

[63] The 'peace dividend', put simply, was the desire for many governments and electorates to save money on defence matters since the Cold War bi-polar threat had vanished.

The Recent Past

In the Canadian context, the military was about to embark on an unprecedented routine of deployments to peace support missions. While Canadian troops had certainly participated in United Nations missions before, few envisioned the frequency and volume of troops commitments to come. Meanwhile, Operation SALON in 1990 placed Canadian soldiers on national and international news in various states of conflict with the Mohawk bands resident at Khanawake and Oka. While the state of close quarter skills during this mission has already been mentioned in the introduction, another key issue evolved from this operation – the concept of 'Rules of Engagement'. For this mission, soldiers were simply provided with standard orders and some notes from the existing CF publication on Aide to the Civil Power. In the review process after the mission, the CF noted the requirement for Rules of Engagement, a set of legal boundaries authorized by the government through the Chief of Defence Staff.[64] These Rules have been used on Canadian missions, both oversees and domestic, since 1990 and have changed many of the concepts of operations, including at close quarters. Contrary to this fundamental understanding, one recent reference went so far as to indicate that

> *...a soldier training to attack enemy soldiers does not concern himself with delicate questions about how far he can go in a fight without breaking the law. Either the enemy dies or he does.*[65]

While this may underline a certain accuracy regarding of the serious nature of close quarters operations, it does not encompass the fundamental contemporary aspect of using minimal force to achieve any mission. This requirement has clearly made the training for

[64] One of the key features of Rules of Engagement is that they are permissive in that they indicate to a soldier when he can engage whom with what level of force. Contrary to these are Open Fire Orders, which are part of war fighting directions. Open Fire Policy is restrictive, i.e. you generally have the okay to fire at and kill whomever you need to except in the circumstances laid out in Open Fire Orders.

[65] Shillingford, p. 15.

and conduct of operations, especially at close quarters, a far more complex issue that will next be considered in the discussion of the present and future security environment.

The Present

With at least a cursory understanding of the recent past, consideration will now be given to the context of the present operational environment. An understanding of present CF mandates, concepts, and realities will provide the relevant background information before the discussion can complete the evaluation of the environment for future operations, including those at close quarters.

Starting with the present mandates, this section will consider several levels of direction, commencing at the highest level. According to its own direction in manual B-GG-005-004/AF-000, the overall mission of Canada's Department of National Defence and the CF is to "defend Canada and Canadian interests and values, while contributing to international peace and security". [66] As nebulous as the statement might sound, it clearly enunciates a requirement for a set of real abilities and a considerable amount of flexibility. Next, the strategic objective for the CF is confirmed as the ability "to generate and employ effective, multi-purpose, combat capable forces".[67] While not particularly useful for specifics, this stated requirement has a clear overriding implication with the use of the terms "effective", "multi-purpose" and "combat capable"; that is, that the Canadian military had better be ready at any time for any type of mission up to and including combat operations. Also implied is the requisite capability to conduct successful operations anywhere in the world as required. As the reader may well have guessed and

[66] B-GG-005-004/AF-000, p. 1-1.
[67] Ibid.

will see in upcoming discussion, the development and maintenance of a strong close quarter operations programme will be a vital component of effective force provision, operation, and sustainment.

The *1994 Defence White Paper* further outlines the operational priorities for planning and consideration purposes. In order of precedence they are:

a. defend Canada

b. defend North America

c. contribute to international security

d. foster emergency preparedness across Canada[68]

Interestingly from this list, it seems that the Canadian Forces has spent a considerable amount of its time and resources on international security since the end of the Cold War with some notable expenditures of effort with national emergencies like the Ice Storm of 1998 and the Winnipeg Floods of 1997. Suffice to say that any recommendations for close quarters operations training must support each of the four White Paper priorities.

A final issue of note here is the articulation that "Operational effectiveness of the CF depends on the development of doctrine and sufficient personnel, training and equipment to employ it properly."[69] While it certainly seems to make sense, the Author can find no doctrinal references to close quarters operations as such. While the Directorate of Army Doctrine has produced specific direction on dozens of aspects of potential operations, from surveillance with the new 'Coyote' vehicle to operations in

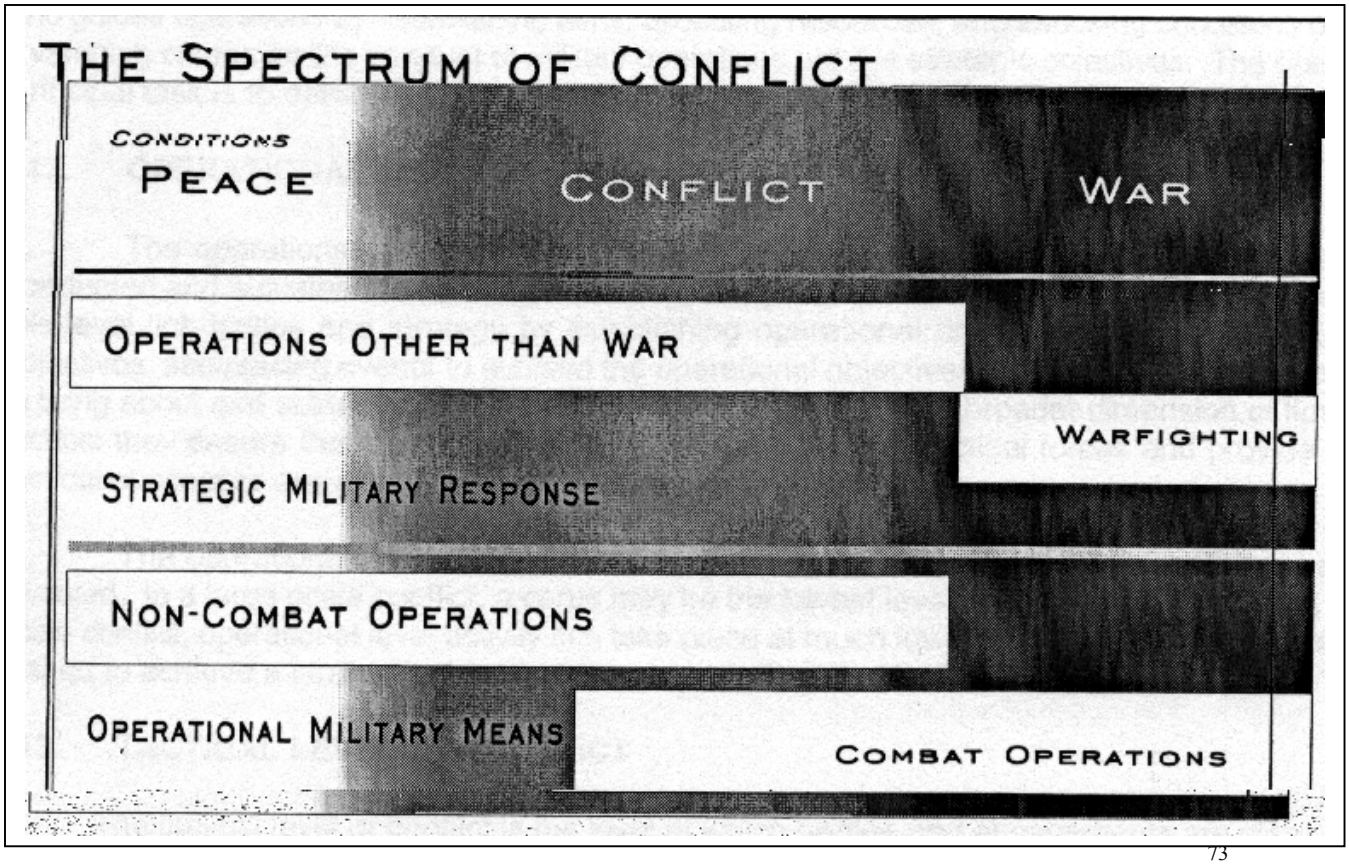
[68] Ibid., pp. 1-1, 1-2.
[69] Ibid., p. 1-2.

complex terrain[70], none as yet unify the concepts of close quarters operations at the national or even Canadian Land Forces (army) level. This is a troubling issue; therefore, the discussion will return to the topic of higher direction and control at a later point.

Some additional concepts will help to frame the challenge in understanding future operational requirements and environments. The first concept is that Canada will always operate as part of a larger coalition or alliance.[71] This signifies that Canada's military will not likely grow large enough to take on a stand-alone role and, more importantly, that it must be interoperable with major allies and potential coalition partners. In order to better understand other potential allies, this discussion will review close quarter operations and training in several other countries, with an emphasis on Canada's major ally, the United States.

The next key concept is the relatively recent development and understanding of what is called the 'Spectrum of Conflict'. Shown in a graphic format for e97raphept1c 0.1000.4n5

context, direction states, "While the overall focus must be on war fighting, the CF's frequent role in OOTW is critical and cannot be ignored".[72]



[73]

Figure 3.2 – The Spectrum of Conflict

Additionally, it is accepted that "as with peace and conflict, the distinction between war and other than war will be blurred"; in fact, "in military terms there may be little if any distinction between the conduct of combat operations in war fighting and OOTW"[74].

[72] Ibid., p. 1-3
[73] Ibid., p. 1-4.
[74] Ibid.

The latter issue brings out two salient points: one, any new CF close quarters operations system will need to articulate and train for use across the full spectrum of operations; and, two, the issue of who is at war or in combat or not, is somehow more complicated than ever.[75] The reality of the present situation is often distorted by the political/social use of terms such as war, OOTW, peace, and combat operations. Public understanding or views may be considerably different from the understanding of soldiers on any given operation. A troublesome issue here is the confusion of the association between the terms 'war' and 'combat'.

> *The basis of the problem lies not with the understanding of the mission by the soldiers sent to prosecute them but rather with political and public comprehension of the distinction between 'war', which is an act between states, and 'combat' which is an act between people.* [76]

Hence, you could be at war and have no combat activity over a certain period; or, be at peace or in OOTW and have bouts of combat. Unfortunately, this seemingly simple idea has difficulty translating politically and via media information sources. Regardless, this issue is critical for close quarters training in the sense of a full spectrum and flexibility requirement. As well, it is important to understand the decision-making climate when proposing and designing future programmes.

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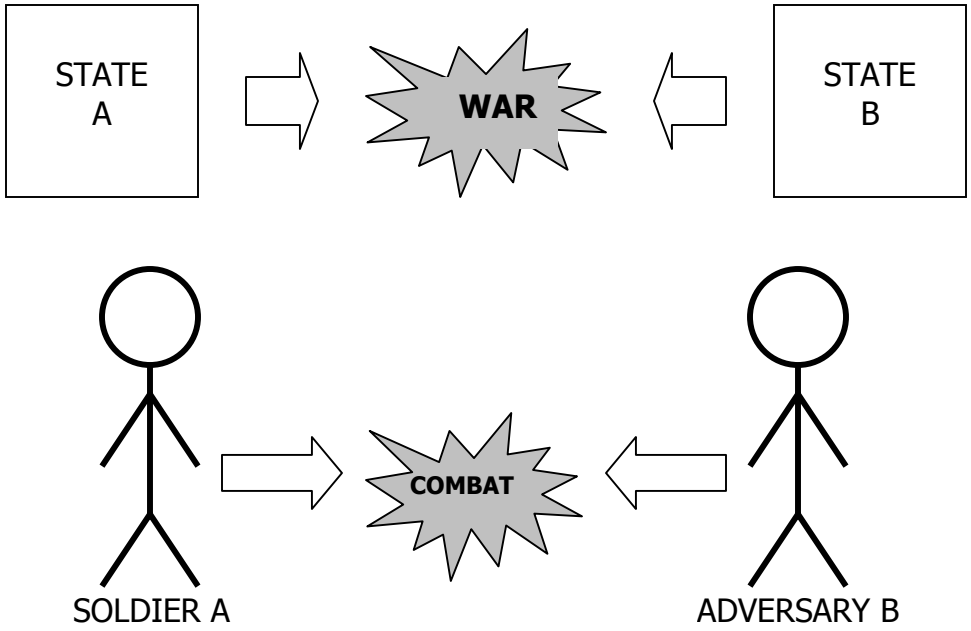
[75] Consider, for example the employment of 3 RCR's Para Company during Operation ATHENA (in the former Republic of Yugoslavia, 6 April 2001) as an outer cordon force for a mission to verify the activities of a Bank under the auspicies of the Office of the High Representative. While the mission went well with less than expected resitance and no injuries to Canadian soldiers, it does provide an idea of the span of missions included in OOTW. Captain Rob Calhoun, "Operation ATHENA 6 April 2001", The Bulletin, Vol 9, No 1, 1-3.

[76] LTC Keith E. Bonn, and MSG Anthony E. Baker, Guide to Military Operations Other Than War, (Stackpole Books: Mechanicsburg, 2000), pp. 2-3. Another interesting aspect here is the designation by the United Nations mandate of "war" as an illegal activity according to international law. Instead, the UN can authorize the application of force for stabilization or similar activity.

Figure 3.3 – WAR versus COMBAT



The final concept of note outlined for the Canadian Forces is the categorization of operations into two groups: 'routine operations' which are know about ahead of time and can generally be planned and prepared in detail; and, 'contingency operations' which are unforeseen and require a greater level of creativity and flexibility for successful resolution in a timely fashion.[77] Again the possibility of unforeseen contingency operations will demand a higher level of standing readiness in all aspects, including close quarters training across the full spectrum of operations.

The present realities of Canada and, indeed, most nations, can be summarized in a few important issues. The search for the peace dividend discussed earlier has seen a general trend for military force and capability reduction. The Canadian Conference of Defence Associations Institute published its October 2002 report with the title *A Nation*

[77] B-GG-005-004/AF-000, p. 1-7.

at Risk: The Decline of the Canadian Forces – certainly the gist of the article is clear from the title.[78] Caught in a paradoxical situation of ever increasing demands and further reduced budgets and resources, the CF, like many other militaries, is forced to make decisions on priority issues and/or accept reduced or lost capabilities.[79] Ironically, some of the reductions have come in the form of some basic military requirements. The Author recalls a Commanding Officer preparing a battle group[80] for overseas operations and directing that there would be no time allocated for physical fitness training during the working day due to the busy pre-deployment schedule. While this may seem somewhat ludicrous as fitness is generally considered a basis for military readiness and operational capability, it is not particularly uncommon. Clearly, despite even a basic understanding of the benefits, the impetus and priority of training such as close quarters operations may soon come into question.

The Foreseeable Future

While predictions of any real accuracy are difficult, if not impossible, the foreseeable future looks to pose a host of considerable challenges. The rapid rate of technological advance with the accompanying quantum leaps in weapon lethality, accuracy, and range would seem to sound the death knell for requirements of close quarter operations training. Realistically, however, this seems unlikely. Noting the previously discussed Spectrum of Conflict with its 'blurred lines' and grey areas, multi-

[78] Conference of Defence Associations Institute, On Track. Vol 7, No 3, (9 October 2002).

[79] Conference of Defence Associations Institute, Caught In The Middle: An Assessment of the Operational Readiness of the Canadian Forces, (2001), p. x. Note that even US forces were reduced by almost 40% from 1992 to 2002.

[80] A Battle Group in this context is an infantry battalion with an armoured reconnaissance squadron, an artillery battery, and an engineer squadron attached equaling approximately 900 personnel.

spectrum operations in a constantly changing environment will be the expected norm. Recent operations in Afghanistan provide an excellent example as the American efforts spanned heavy bombing by B-52s, rapid airmobile operations, and Special Forces soldiers on horseback with local warlords. Clearly there is a requirement for a flexible and full spectrum close quarters programme.

The American *Black Hawk Down*[81] experience in Mogadishu, Somalia in October 1993 is also an example of what is referred to as the '3 Block War'.[82] While perhaps not 'war' by definition but rather some form of OOTW, clearly combat operations were undertaken in a relatively tiny area over a relatively short span of time. The aspect of urbanization must also be mentioned briefly. As 80% the world's population now live in urban areas, the special nature of such areas with a preponderance of close quarters, and reduced ranges/visibility must be recognized as a major factor in the future operational environment.[83] Certainly, future success in such areas and circumstances will rely on well-prepared and motivated soldiers with a competent and flexible skill set, including at close quarters.

With the advent of more and more sophisticated and capable communications systems, there will likely be no reduction of the influence of political and media intervention, regardless of where and when conflict occurs.[84] Therefore, the application of all forms of force will have to be better taught/trained, and fully understood before missions; and, more carefully applied in actual situations, with the understanding that

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[81] Mark Bowden, Black Hawk Down, (Signet Press: New York, 2001).

[82] Chris McNab, The Special Forces Endurance Techniques (Brown Books: London, 2001), pp. 170, 185.

[83] Len Cacutt, Ed., Combat: Armed and Unarmed Combat Skills from the Official Training Manuals of the World's Elite Military Corps, (David & Charles: London, 1988), p. 106.
and
Clark, p. 31.

[84] McNab, p. 185.

operations of any size, shape or form can and will be monitored, reviewed, critiqued, sensationalized, distorted, etc. While soldiers and even commanders cannot really affect the availability or use/misuse of such communications realities, they can and must do everything within their power to ensure they are properly trained to successfully complete their assigned mission within the realities of the present and future operational environments.[85]

Close Quarters Operations Training…So What?!

Consideration of operational environment of the recent past, present, and foreseeable future does not alter the two key points from the historical context discussion – that conflict, by whatever name assigned, will continue as part of human existence; and, that given the ability to develop and adapt, close quarter operations will remain important for operational flexibility and success. Understanding the likely future environment does, however, confirm the requirement for a flexible system with a full spectrum of applications, from the lowest level domestic and international events through mid-intensity missions to all out warfare and/or the defence of Canadian national sovereignty.

At this point a short sidebar regarding the benefits of close quarters operations training is apropos. Considering programmes in a general sense, there are both direct and indirect benefits afforded by proper training. Direct benefits include the development of useable and relevant soldier skills that provide additional options and capabilities to commanders. Simply having trained and capable soldiers with close quarters skills can

[85] Directorate of Land Strategic Concepts (Canada), Future Army Experiment – Operations in the Urban Battlespace, Fort Frontenac: Kingston, May 2002, provides some excellent insight and examples of the complexity of the issues facing the CF regarding decisions for training, equipment, and doctrine priorities. One of the key elements in the future urban battlespace, is, of course, the likelihood of adversaries at very close proximity and potentially amid the entire spectrum of conflict in the 3-block war.

effect the development and execution of a wide variety of operations. As important as these direct benefits are to mission success, the potential indirect benefits are even more valuable. Virtually every précis or document on close quarters operations training alludes to a set of common effects: increased self-confidence, aggressiveness and willingness to undertake difficult tasks (including combat operations); as well as improved physical fitness, reaction under stress, unit morale and cohesion. Certainly, few commanders would turn down an opportunity to acquire both the direct and indirect benefits of a suitable close quarters programme.[86]

Returning to the 1983/1989 Canadian Forces programme, a consideration of its strengths and weaknesses is necessary for understanding of where a new programme could venture to improve the likelihood of operational success on future missions. In summary, the strengths are listed below:

a. simple and effective techniques (based on those from British and American programmes, according to the SSF Manual),

b. a clear attitude of serious "life or death" training as could be expected from the Cold War era,

c. programme articulation in a series of publications, including a national manual (B-GL-318-018, PT-001),

d. support for training initially through the units of the SSF and later through the Regimental Battle Schools,

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[86] U.S. Army Field Manual 21-150 COMBATIVES. (Dated December 1971), pp. 43.
and
Marine Corps Reference Publication 3-02B, Close Combat, (Department of the Navy. Headquarters United States Marine Corps: Quantico, .11 February 1999), p. 1-1.
And several other sources.

e. a graduated system with a basic and instructor level as well as an emphasis on frequent training within units and sub-units,

f. based on a strong personality who also provided an excellent example of personal technique and application

Simultaneously, the 1983/1989 programme suffered from the following weaknesses/flaws:

a. personality-based system did not ensure that the dominant personality remained to influence and/or did not have the depth to maintain momentum

b. definite lack of senior personnel (officers and senior non-commissioned officers) with the requisite knowledge, experience, and credibility to maintain and positively influence a developing programme

c. no clear mechanism for constant amendment to ensure ongoing relevance

d. due to a clear war-fighting slant of training, limited usefulness on OOTW or low intensity operations at home or abroad

e. limited access for CF personnel – 1983 programme was for SSF only and 1989 programme was mainly conducted at infantry regimental/area battle schools with only one or two instructors' courses being run per calendar year

f. no provision for annual refresher or instructor symposium

g. little apparent influence or direction from the CF as a whole and/or the Land Forces (which has the national lead for this area) and no real incentive to participate

h. instructor competence and currency became a key issue as most taught infrequently as a secondary duty only.[87] Additionally, there was no real effort to encourage those with related civilian qualifications to become instructors or instructors to enhance their long-term skills with civilian training or courses

So, it seems that while the 1983/1989 programme had some considerable strengths, it possessed certain fatal flaws that endangered its effectiveness even as it was created. One of the main factors, which will be discussed again later, is the programme's inability to adapt to the changing operational environment, as it had no driving force or mechanism to do so. A prevailing 'isolationist' attitude also existed in that there is no indication of cooperative activity between those who ran the training (i.e. the infantry corps on behalf of the army) and likely interest groups such as Military Police, naval boarding parties, aircrews (for escape and evasion and for aircraft/airfield security), reserve units (likely to be used for domestic operations and on overseas tours), Joint Task Force 2 (special operations group), the Royal Military College of Canada, etc. Unfortunately, by reducing input sources and breadth of CF-wide training, these failings drastically limited the benefits of the programme, direct or otherwise.

In a 1993 paper for the Land Forces Command and Staff College, Major Jin Hou, a highly skilled martial artist, noted some key issues with the 1983/1989 programme. His paper, like this one, immediately accepted the requirement for close quarters training for CF soldiers and listed the major flaw as " a virtual void of any formalized program in

[87] This key flaw was highlighted by DAT who stated "some training within units was deemed unsafe and personnel conducting training were not properly qualified". Directorate of Army Training (Canada), Memorandum 1006-1(DAT 3-6) (Dated 25 June 2001).

unarmed combat training. Any unarmed combat training in the CF is often ad hoc and has been less than successful."[88] Additionally, Major Hou pointed to a widespread lack of support and priority for close quarters training. Despite the generally understood and accepted benefits of such training, he indicated that most units and their commanders would rather support hockey, broomball, cross-country, golf or even curling than bayonet or other close quarters training for soldiers. Importantly, he underlined a reluctance of commanders to promote aggression and close quarters training in fear of creating soldiers with "anti-social violent behaviour".[89] Major Hou also challenged such logic by noting that well trained and disciplined soldiers should and could be expected to use their special skills in a mature and responsible manner, similar to professional athletes, police officers, etc. To summarize and close his paper, Major Hou asserts that the CF must make changes to the programme to make it mission-oriented across the spectrum of operations as well as infusing it with a "boldness of commitment from its commanders".[90] Even in 1993, it seems that Major Hou clearly understood many of the issues outlined in this discussion and his key premises should be kept in mind throughout this updated consideration of CF close quarters training.

[88] Major Yun Jin Hou, "The Need for Unarmed Combat Training in the Canadian Army", Paper prepared and submitted at Canadian Land Forces Command and Staff College, 17 November 1993, p. 1.
[89] Ibid., p. 4.
[90] Ibid., p.6.

Chapter 4

RELATED PROGRAMMES – WHAT CAN WE LEARN FORM OTHERS?

Recognizing some of the failings noted with the 1983/1989 programme, the CF, with the Land Forces as lead, will begin to institute an new programme labeled "Close Quarter Combat" beginning in 2003. While this discussion will consider this fledgling programme as well, a look at some related experiences will first provide a better understanding of how our programme is unique and/or similar to other systems. This portion will first review certain useful military examples followed by some notable civilian examples. While some areas will have clearly more information available and considered useful, this should by no means equate to a "push" or preference for that system. Each and every example, however, should provide some useful context for understanding the present CF programme and for developing our future programme(s).

A look at military programmes will begin with some segments regarding British, South Korea, and Russian system features and will then proceed to more lengthy considerations of Israeli and American systems. Having already underscored the importance of British noteworthy figures of Fairbairn and Sykes in the World War II close quarters context, the British system will be reviewed first.

The British Army

At the present time, the British Army maintains a robust close quarters programme ingrained in its overall system and structure. While the famed Special Air Service has its own established programme, this discussion will remain within the realm

of more regular units. Some examples from the overall programme will provide a better understanding of the training context. First, annual inter-company and inter-unit boxing competitions are important and well-supported events in most combat arms and many other units. In a basic sense, this type of activity not only inculcates but also rewards the soldiers' fighting ability and instincts, albeit in a more sporting format.[91] Second, the Parachute Regiment also instills and builds the fighting aggression of its soldiers in an event called "milling". During carefully controlled two-minute bouts, soldiers with little to no formal training or skills face off in a ring to exhibit maximum effort and fighting aggression. Considered barbaric by some, these events prepare the Parachute Regiment

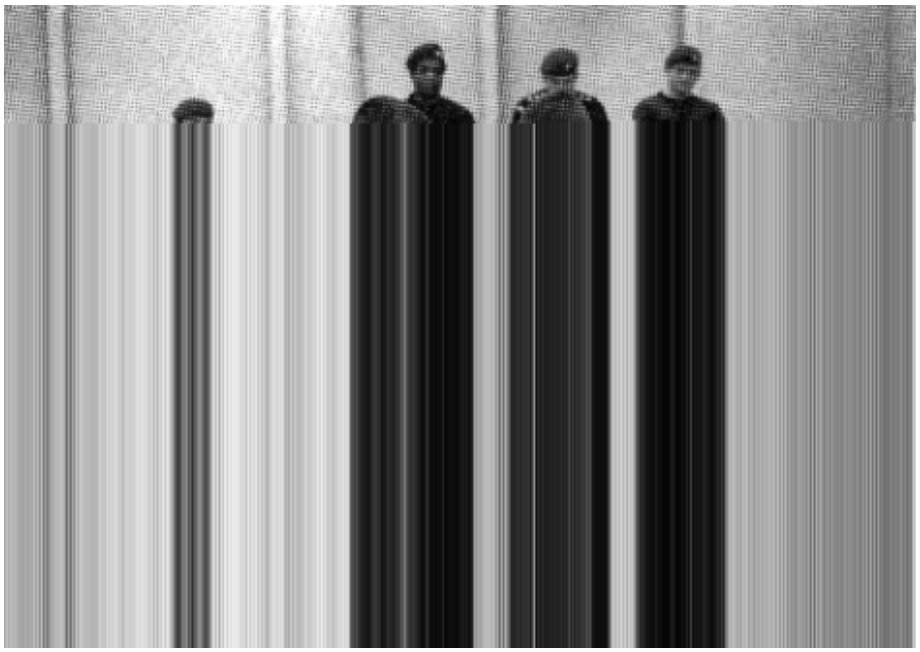

Figure 4.1 – British Parachute Regiment recruits undergo 'milling' drills designed to increase aggression and confidence. [92]

soldier to face battle aggression and the sensation of being hit.[93]

[91] The Author well remembers the enthusiasm for such event during his exchange tour with 3rd Battalion of the Parachute Regiment. Ironically, the walls in the sports facilities at the Royal Military College of Canada in Kingston carry the names of boxing champions…these events ended in the 1970s.

[92] Ibid., p. 66.

Potentially at the heart of such practices are two events of the last twenty years of British military experience – the Falkland's War and operations in the province of Northern Ireland. The former event reminded the British Army of the realities of war as soldiers fought, killed and died to reclaim the islands. Specifically, operations in the Falkland's campaign included the requirement for the use of the bayonet and close quarter skills in missions throughout.[94] This helped to clarify the relevance of such basic fighting skills in the context of 1982 high-technology warfare. Meanwhile, the British Army's participation in the latter event with deployments to Northern Ireland over the past thirty years has sensitized most to the potential operational and political fall out of misuse of force in the province.

Further, courses like the Arrest and Restraint Course, run by the Army Physical Training School (APTS) in Aldershot since the early 1990's, are based on the well understood and articulated need for greater discretion of technique application in such OOTW, particularly amid long-term national and international media coverage.[95]

One final notable aspect of the British Army close quarters training concept has to do with an organization called the British Army Martial Arts Association (BAMAA). While its primary function is to link martial artists for training venues, this unique group could also provide considerable support to the army and/or armed forces close quarters programmes, directly and indirectly. In summary, the British military system maintains an operational understanding of the realities of combat and/or war, likewise

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[93] Steve Crawford, Deadly Fighting Skills of the World, (St. Martins Griffin: New York, 1997), p. 21.
and
Shillingford, pp. 41, 66.
[94] Ripley, p. 6.
[95] The Author completed the Arrest & Restraint Instructor Course in 1994.

acknowledges the realities of OOTW, and has structures like the APTS and BAMAA to further support the training and development for close quarters training and operations across the use of force spectrum.

The South Korean Example

South Korea, the second example, provides a very different view than Britain. With a long history of occupation by other nations and a recent past including the bitter struggle that separated North and South Korea in the 1950's, South Korea does maintain a certain modicum of understanding regarding the realities of war at a national level. Likely the most salient aspect of their close quarters context is the creation of and support for the national martial art, Tae Kwon Do. (TKD) Created by the recently deceased General Choi Hong He, TKD has achieved considerable success in various formats.[96] Militarily, all officers attending South Korean military academies must undertake TKD training and achieve black-belt status prior to graduation. Importantly, since this programme element specifically trains the officer corps, it better enables all military units to undertake the activity as close quarters and fitness training and, more importantly, as a national training event. Finally, TKD has achieved overwhelming success as a worldwide and Olympic sport. The South Korean example illustrates a system of military close quarters taken to higher levels as a nationally unifying and internationally recognized event. It should be noted here, however, that even in such a nationally recognized and established system there has been some recent concern regarding the 'sportification' of Tae Kwon Do and the replacement of its foundations in self-defence and combat with

[96] Shillingford, p. 37. Tae Kwon Do literally means "hand - foot way" or the "way of hand and foot". It is interesting to note that it is a combination of some indigenous arts and Shotokan karate taught to General Choi while he lived in Japan during Japan's occupation of Korea.

more visually appealing and flashy techniques. While many instructors and schools maintain the discipline and dedication closer to Tae Kwon Do's roots, like many martial arts, it faces potential degradation from popular commercial interests.[97]

The Soviet Legacy and Russia

The Russian military close quarters system harkens back to the establishment of the Soviet Union. As noted earlier, it was Lenin himself that sent Anatoly A. Harlampeif and Comrade Vorosilov on a two-year journey around the U.S.S.R. to research indigenous and foreign arts in order to distill them into a new and 'better' Soviet system. This system was called **SAM**azchitya **B**ez **O**ruzhiya, or SAMBO for short, and percolated over two dozen different grappling, throwing and striking arts into a single system suited for the Soviet military.[98] SAMBO itself could further be divided into three distinct forms: basic combat SAMBO, Spetznaz SAMBO and sport SAMBO. Combat SAMBO was taught to standard combat arms units. Consisting of approximately sixty basic techniques for both offensive and defensive use, it contained grappling, pressure points, strikes, and bayonet/knife fighting skills. SPETZNAZ SAMBO was taught to Russian special operations units (called SPETZNAZ for short in the West) and special police forces.[99] Accordingly, this version had more sophisticated and lethal techniques

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[97] Chan-Yong Kim, "Raider of the Lost Art", Martial Art, May 2003, 41and 43.

[98] As the U.S.S.R was an atheist organization, much of the "art" from the various styles of martial arts were purposely 'filtered out' in developing SAMBO.

[99] Shillingford, p. 21.

and

SSgt Dale C. Simmons, "Countering Another Russian Threat", Marine Corps Gazette, (April 1986), p. 60.

that were performed in more realistic settings.[100] The final element of SAMBO was the sport aspect used both inside and outside the Russian military. Similar to the effects of British boxing and milling, this version of SAMBO provided a competitive venue for training and, while some of the skill sets and fighting outcomes may be considerably different from actual operational use, likely helped to take training to a higher level. Further, commercial civilianized versions of SAMBO have been and are advertised throughout North America in various formats.

In the 1990's, after the collapse of the Soviet Union, a programme simply called the 'Systema' replaced SAMBO. Indications are that training and techniques are very similar to SAMBO, including a parallel division into three components for military and sporting use.[101] From the Soviet/Russian experience, points of note include a synthesized system developed over the long term with various levels of training and expertise. Note that SAMBO will appear again in this paper as the United States Marine Corps actually devised an 'Anti-SAMBO' training programme in the late 1970's.

The Israeli Example

In 1948 the state of Israel was declared and the new national entity had to immediately defend itself from it surrounding neighbours. This action and the near constant threat of assault on the country created a particular slant on close quarters training and operations. The close quarters system devised for the Israeli Defense Force (IDF) was created in 1948 by Imi Lichtenfeld and was called 'Krav Panim l'Panim'

[100] Spears, p. 138. A 1986 Reader's Digest article on the SPETZNAZ even suggested that special forces soldiers practiced their SAMBO on the local gulag inmates to simulate real combat with lethal results.

[101] Aran Dharmeratnam, "Escape and Evasion – The Teachings of the Russian System", Eye Spy, Vol. II, Issue 14, (2002), p. 53.

(literally, combat face-to-face) or 'KEPAP' for short. Initially, KEPAP was taught to elite and special operations forces only. Rather than merely a system for close quarters combat and self-defence, it incorporated aspects of physical fitness, communications, survival, first aid, and foreign languages.[102] A second system called 'Krav Maga' (combat contact) was soon created for dissemination to the regular and reserve units of the IDF. While this system was not quite as advanced as the special operations version the "original concept of Krav Maga was to absorb any martial art that was useful by taking its most effective techniques and teaching them quickly and efficiently"[103]. As a composite system it included techniques from boxing, wrestling, judo, karate, and several other arts as well as knife, bayonet, and baton techniques. [104]

Most important to the Krav Maga system employed by the IDF was, and is, the emphasis on challenging, realistic training.[105] Described as a "well-rounded hybrid system which encouraged students to be aggressive and decisive in combat"[106], the programme also employs "boil pressure training" which places the student under considerable psychological and physiological stress: "one blow after another, falling down, having your hair pulled, and knowing how to look, to think, and to keep your cool, throughout"[107]. Some training scenarios involve ten versus one and twenty versus one drills to maximize stress and, according to system proponents, helps to prepare the soldier

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[102] Jim Wagner and Major Avi Nardia, "Inside Israel: The Martial Arts of the World's Most Highly Trained Fighters," Black Belt, November 2002, pp. 67-68.

[103] Ibid., p. 68.

and

Scott Shaw, "Krav Maga Captures the Mass Market," Martial Arts Success, January 2003, p. 35.

[104] Wagner and Nardia, ibid.

and

Colonel David Ben-Asher, IDF Reserves "Krav Maga and Physical Fitness," Marine Corps Gazette, April 1986, p. 58-59.

[105] Ben-Asher, "Krav Maga and Physical Fitness," p. 60.

[106] Wagner and Nardia, ibid.

[107] Colonel David Ben-Asher, Fighting Fit: The Israeli Defense Forces Guide to Physical Fitness and Self-Defense, (Perigee Books: New York, 1983), p. 75.

for the real stresses of combat.[108] Emphasizing this call for realism, former Chief of Combat Fitness for the IDF, Colonel (Retired) David Ben-Asher confirmed

> *A fighting army must have outstanding endurance and skills. Its soldiers must overcome obstacles in the fields and in the cities, succeed in hand-to-hand combat with or without a weapon, get through water obstacles, move correctly, and advance swiftly and effectively.*[109]

Additionally, Ben-Asher provides a useful list of Krav Maga programme priorities as follows:

a. simplicity

b. short term instruction with continued follow up

c. clarity of purpose

d. adaptability

e. technique proficiency

IDF close quarters programmes continue to develop. As the Krav Maga system was expanded to include the training of civilians in certain communities in the early 1980's, its use in conscript and reserve training made it widely known and practiced throughout Israel.[110] Since the 1982 development of a civilian commercial Krav Maga system, it has become very popular in North America and is presently the training system used by over 200 American police forces. Overall, it provides an excellent example of a system that has grown and developed over fifty years while maintaining its focus on real capabilities in the defence of the Israeli state while branching out to civilian and commercial interests

[108] Wagner and Nardia, p. 70.
[109] Ben-Asher, Fighting Fit, p. 14.
[110] Ben-Asher, "Krav Maga and Physical Fitness," p. 58.

as well. It should also be noted that the system has both a self-defence aspect and an offensive combat aspect.[111]

The United States' Example

Having looked at several systems, this discussion will now continue with an investigation of the close quarters programmes of our closest neighbour and ally, the United States of America. With the size and capabilities of the American military, it is no real surprise that there is a large volume of information to consider and cover. This portion of review will be divided into three parts: US Army programmes, US Special Forces programmes, and US Marine Corps programmes. These three aspects will provide some excellent food for thought and development for a future Canadian system.

The US Army

The US Army, formed in 1775, even before the signing of the Declaration of Independence, has the longest history of American close quarters operations and will be considered first. In fact, sources do allude to close quarter operations skills of various pre-independence forces serving in America, 'Ranger' units in particular. As the earlier historic summary covered the notable issues up to the end of the Second World War, this portion will concentrate on developments over the last thirty or so years.

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[111] Ben-Asher, "Krav Maga and Physical Fitness", p. 58.
and
Shaw, pp. 28-30.
also
Wagner and Nardia, p. 70.
It is interesting to note here that there was a major court battle in the 1980s regarding the legal term 'Krav Maga' for military training and civilian/commercial use. In the end, commercial interests gained legal right to the name for an international commercial training enterprise. Many IDF units have returned to calling the training 'KEPAP' of 'LOTAR' (for 'Lochama Be Terror' or counter-terrorist training).

Rex Applegate, the noted World War II instructor/trainer had considerable influence in most training circles up to his death on 1998; in fact, he had only recently retired from a position as a special advisor to the American Government when he died. Not surprisingly, the mainstay of US Army close quarters training until only recently was *FM 21-150 Combatives* printed in 1971(*Combatives-71*), largely influenced by Applegate's training concepts. A main reference for the 1983 SSF Unarmed Combat programme, *Combatives-71* outlined a system designed for war-fighting in the Cold War. Acknowledging the advent of technology, it stressed that, despite the introduction of new and more powerful weapons, battlefield success often required close combat to complete the mission.[112] Likely this slant developed from the lessons learned in fighting a determined enemy in Vietnam for the six years previous to the manual's publication.

The manual itself is divided into two parts: rifle bayonet fighting and hand-to-hand combat. Importantly, contrary to the 1983 SSF manual, however, special emphasis was placed on training focus so that it would not become mere parade/garrison-type drill movements.[113] In fact, *Combatives-71* insisted, "each man must think and act for himself. Therefore, the instructor should avoid the harmful practice of turning rifle and bayonet practice into a drill"[114]. To add movement and realism to bayonet fighting, 'pugil stick' sparring matches were encourage. Pugil sticks were wooden poles with protective foam on each end simulating a rifle with bayonet. Participants wore protective helmets and gloves and engaged in heated competitions to instill aggression and provide the trainee with a more random/realistic sensation of combat stress and being hit.[115] Meanwhile, the

[112] Combatives, 1971, p. 1.
[113] Ibid.
[114] Ibid., p. 24.
[115] Ibid., p. 31.

hand-to-hand portion included basic kicks, punches, throws, chokes, counters, knife fighting, sentry removal drills, and search/secure drills.

The programme was specifically designed for those with no previous experience and looked to produce proficient hand-to-hand fighters with increased confidence, fitness, aggressiveness, and will to fight. These should sound familiar, as they are the main source for the 1983 SSF manual. [116] As with the SSF system, *Combatives-71* was a reasonable, if somewhat unimaginative, approach to close quarters operations in the American Cold War/Vietnam era.

American involvement in the Vietnam War soon flavoured all aspects of its military, including close quarters training. Despite some advances made within XVIII Airborne Corps through the efforts of Michael Echanis, by 1973 (and the withdrawal from Vietnam) the US Army had effectively ceased to conduct bayonet and combatives/hand-to-hand training.[117] Three main reasons are noted for this shift: recent fatalities during pugil and hand-to-hand training prompted Congressional interest and investigation into the programme; the American focus on the Vietnam debacle created a desire for a re-vamped public image which would be focused on technological warfare rather than training soldiers to kill with their bare hands; and, an underlying acknowledgement that the ten hours of practice during basic training that soldiers received (for many, before being sent into action in Vietnam) was "just enough skill to get them killed in a barroom brawl" and overall useless, especially in combat

[116] Ibid., pp. 43 and 51.

and

Special Service Force Unarmed Combat, Covering memorandum, pp. 1-3

[117] Cater, pp. 3-4.

operations.[118] Certainly there was an understanding of the lack of proper close quarters training, even at this early stage.

Seemingly without central guidance or direction, some aspects of training resurfaced over the next ten years. By the 1980's, the 82nd Airborne (All American) Division was conducting its own Tae Kwon Do-based programme while Ranger units and the Ranger Training Brigade were again conducting training based on *Combatives-71*. Interestingly, a rough survey of soldiers in the 9th Infantry Division during the 1980's found over 900 personnel qualified to black-belt level in one style or another of martial art, despite the disappearance of formal military close quarters training.[119] This statistic rather definitively outlines an untapped and independently developed skill and experience source for close quarters training. Additionally, it seems to indicate that the soldiers themselves understood the value and importance of such training, whether or not it was offered within the formal military training structure.

In 1982, the US Army conducted a series of trials at Fort Lewis, Washington as part of the US Army High Technology Test Bed, including close quarters training. Significantly, the trials evaluated a hybrid close quarters system against three other recommended physical training programmes based on running, partner calisthenics, and obstacle courses respectively. The results placed the close quarters programme well in front of the other options taking first place ratings in four out of the five evaluation areas. Additionally, the close quarters training programme earned highest marks in improving confidence, concentration, mental fitness, self-reliance, and the soldier's will to close with an enemy. The Fort Lewis experiment noted that a simple close quarters training

[118] Robert K Spears, Survival on the Battlefield, (Unique Publications: Burbank, 1987), p. 1
[119] Spears, ibid.

programme could be part of a revamped physical fitness package and should also include an ethical element. It additionally underlined the critical understanding that "the military needs a cohesive personal combat training system that is based upon the projected threat".[120] It would, however, take some time to follow the training-to-threat logic through to close quarters programme updates.

With some momentum gained from the Fort Lewis experiment, certain aspects of close quarters training reappeared in a wider portion of the US Army. Certainly by 1991/92 the US Army Ranger Training Brigade (RTBde) was convinced of the utility of close quarters training and included it in its ultra-arduous combat leadership Ranger Course curriculum. According to RTBde instructor lesson plans, each lesson was introduced with the following speech from the instructor:

> *Hand to hand combat is an excellent physical conditioner and body toughener. It builds a spirit of aggression in the individual and instills a will to fight. In combat it is tough and your enemy will be well trained and disciplined. The chances of you overcoming your opponent are good if you are well trained and disciplined and have the confidence to overcome and defeat your opponent.*[121]

Importantly, American soldiers also spent considerable time practicing bayonet drills and training to fight in close quarters in anticipation of possible trench clearing during the 1991 Gulf War. While most of these skills were not required during the whirlwind 100-hour land battle, American commanders clearly understood the requirement for the training on the eve of battle.[122]

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[120] Ibid., pp. 1-3.

[121] 4th Ranger Training Battalion, Hand to Hand Combat, Period 2. Lesson Outline. (US Army Ranger Training Brigade: Fort Benning, Georgia, 1992), p. 22. The Author well remembers time spent during Ranger training in the 'Bear Pit', a huge sawdust filled circle for unarmed combat training, some 400 Rangers students at a time.

[122] Ripley, p. 6.

Despite this impetus, it was not until December 1992 that the Army produced the updated *FM-21-150*. While some aspects were updated as suggested from the US Army High Technology Test Bed, the new version of *FM 21-150* looked surprisingly similar to its predecessor with only passing indications of the changes of the post-Cold War military. [123]

In 1993, the American military experience in Somalia brought a new reality of potential future operation. While troops from 10th Mountain Division employed fixed bayonets on several occasions to control riotous crowds without implementing lethal force[124], Task Force Ranger troops endured, at high cost, the penultimate '3 block war' experience during the episode outlined in *Black Hawk Down*[125]. From here, the US Army close quarters programme gained new life. By 1995, a new system based on Brazilian Ju Jitsu grappling/ground fighting was being developed by the US Army's close quarters experts at the 11th Infantry Regiment of the Infantry School at Fort Benning, Georgia. In addition to more regular training, competitions developed and were soon being encouraged and conducted approximately every three or four months.[126] Bouyed by the new found impetus for training, elements of the 82nd Airborne Division were actively pursuing the training in order "to put tools in a soldier's kit bag that will bring him home alive".[127] Meanwhile, in South Korea, the US Army's 2nd Infantry Division had renewed an aggressive training system incorporating indigenous and popular Tae Kwon Do and the Brazilian Ju Jitsu-based programme from the 11th Infantry Regiment, the US Army training lead. From the 2nd Division experience, Colonel Odom confirmed increased

[123] U.S. Army Field Manual 21-150 COMBATIVES. (Dated 30 September 1992).
[124] Ripley, pp. 253-254.
[125] Mark Bowden, Black Hawk Down, (Signet Press: New York, 2001).
[126] Clark, p. 30. Note the competitions will use modern Pancration rules in 2002/2003.
[127] Ibid., p. 31.

physical fitness, confidence, discipline, and teamwork as well as a newfound sense of understanding/interest in South Korea culture.[128]

In January 2002, the US Army finally produced and issued it new manual *FM 3-25.150 Combatives*. For many this manual was a sign that the US Army was finally moving forward , would no longer rely on "archaic manuals written in the 1960's", and had indeed provided " a solid army-wide combatives program that prepares soldiers for the modern battlefield"[129]. Of note, the new manual features far better photos and explanations with a greater emphasis on grappling/ground fighting techniques. Bayonet fighting has a renewed importance with the backing of this quote from General George S. Patton:

> *Very few people have even been killed by the bayonet or saber, but the fear of having their guts explored with cold steel in the hands of battle-maddened men has won many a fight.*[130]

In addition to the new techniques, the manual makes a fundamental leap in close quarters training and operations by discussing such issues as mental calmness, situational awareness, group tactics, rapidly changes situations and, most importantly, for the present and likely future operational environment, a recognized division of lethal and non-lethal techniques.[131]

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[128] Colonel William O. Odom, "Back to the Battlefield", Black Belt, November 2002, pp. 58, 60. Importantly, Colonel Odom stresses that the goal of the programme is not to make "highly proficient Tae Kwon Do practitioners", but rather to use the training and techniques of Tae Kwon Do "to forge better soldiers". Ibid., p. 63.

[129] Clark, p. 30.

[130] U.S. Army Field Manual 3-25.150 COMBATIVES. (Dated 18 January 2002), p. 1-1.

[131] Ibid., pp. 1-1, 9-1, 9-3.

The US Special Forces (Army)

Leaving the US Army in 2002 with its newest manual and programme, the discussion will return to the 1970's in the forum of US Special Forces (SF). While the Army's 'Green Berets' generally used standard US Army manuals like *Combatives-71* as their focal point, they, like many elite/special forces from other nations and times, had more time and effort to expend toward close quarters skills training. Even so, SF units still suffered from a certain lack of time and emphasis for close quarters training. During the late 1970's two SF soldiers, James Webb and John Voice, used their considerable personal talents to improve and personalize the SF close quarters programme, creating a useful 10-day training package combining various arts and styles.[132]

The next major development for US SF close quarter training was a special training event called the "Trojan Warrior Project". Starting in August 1985, a civilian performance enhancement group called Sports Mind was contracted to provide an aikido-based intensive trial programme for two SF A-Teams, 260 and 560. In the final result the project was an unqualified success as participants showed amazing gains from start to end. Average improvements were 96% for physical fitness; 80% for psychological fitness, concentration and toughness; 45% for team cohesion; and, 94% for mission specific tasks/skills.[133] Significantly, all training was conducted by all ranks and one of the SF Captain team commanders commented as follows

> *The training is designed to produce changes in lifestyle rather than impart knowledge for future use. In this regard it differs completely from most formal schooling our personnel have attended. Our greatest*

[132] Cater, pp. 3-5.

[133] Heckler, Richard Strozzi, In Search of the Warrior Spirit: Teaching Awareness Disciplines to the Green Berets, (North Atlantic Books: Berkeley, 1990), pp. xii-xiii, 1, 263.

challenge in the future will be to find ways to prevent the closing of our soldiers' minds.[134]

Follow up after three and five years again validated the success of the programme with indications of increased operational success, improved physical and mental performance as well as greater resilience to Post Traumatic Stress Disorder for participants. Ironically, the programme was discontinued as it was declared "too unorthodox" for senior commanders in the SF world (which is specifically designed and nurtured to be unorthodox by nature and application). In 1988/89, the same Sports Mind group conducted a similar but reduced programme for the US Navy SEALS with comparable success.[135]

Of note on closing the topic, the present Army SF close quarters programme is a combination of stand-up and ground fighting, largely taught by contracted groups of specialist civilians. Beyond actual techniques, which may vary according to groups and missions, emphasis is placed on use of force considerations; escalation process and options; and, reality-based training.[136]

The US Marine Corps

With a strong background in close quarter skills, the United States Marine Corps (USMC) will be the last, but certainly not least, military example considered. In the 1980's the USMC updated its programme for much the same reasons felt by the post-

[134] Ibid., p. 263.
[135] Ibid., p. 264
[136] Cater, pp. 5, 56.
and
Kevin Underwood, "Special Forces Warrior Training," America Strikes Back 3, November 2002, pp. 66-68.

Vietnam US Army. Still existing in the Cold War paradigm, the USMC programme took another interesting turn in the late 1970's and early 1980's.

In response to the projected Cold War Soviet menace and the generally feared SAMBO programme, the USMC developed a close quarters element known as 'Anti-SAMBO'. With reports that Red Army soldiers spent up to 40% of their training time conducting SAMBO drills, impetus for the USMC variant grew.[137] An example of what the Anti-SAMBO programme felt it was facing, Soviet Colonel V. Safanov wrote the following:

> *During classes in hand-to-hand [SAMBO] combat against the enemy, Airborne assault troops develop fighting skills, boldness, resolve, initiative, resourcefulness, self-confidence, composure and self-control.* [138]

The Anti-SAMBO programme was conducted by training instructors in SAMBO and Soviet close quarters tactics. This training cadre called the "Red Guerrillas"[139] then traveled from base to base, conducting training for various USMC units. In order to defeat the SAMBO threat, the USMC programme included twenty, three-hour training sessions including both theory and practical application. Training was verified and completed with a written and practical test; after which, the training team moved on to the next base/unit. In addition to training for the SAMBO-skilled enemy solder, the USMC programme also sought specifically to increase Marine survivability in all forms

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[137] Simmons, pp. 60-61.
and
Spears, pp. 138-139.
In hindsight we can likely now understand why 40 % of the soldiers' time could be spent on SAMBO…is must have been relatively cheap and easy to conduct in an armed forces that was going to be bankrupted along with its country over the next 10 years.

[138] Spears, p. 139.

[139] The use of "Red" forces trained in enemy doctrine and tactics was also used by the US Air Force to train pilots and by the US Army to train battlefield commanders to face Soviet tank forces.

of close/confined terrain, to include use in jungle and urban areas; on embassy duty or on an objective; and, against terrorist activity.[140]

In the 1990's, with the demise of the Soviet, and hence SAMBO, threat, the USMC produced a new source manual for training. Entitled simply 'Close Quarter Combat', the manual opened with this clear statement:

> *Close quarter combat is the oldest form of combat known to man. As man progressed, so did his methods of combat. But no matter how technical or scientific warfare become, there will always be close combat. When modern weapons fail to stop the opponent, Marines must rely on their close combat skills.* [141]

Additionally, the introduction continues to separate the notions of self-defense and close quarters combat. While the former avoids and repels and attack, the latter causes "permanent damage to the opponent with every attack and should end in the opponents death"[142]. Further,

> *close combat's goal is to cause permanent damage to the opponent's body with every technique. To accomplish this, you must know the body's major target areas…target areas are attacked violently and swiftly – there are no second chances.*[143]

With the intention of the system leaving no doubts, the USMC programme was based on Linear Infighting Neural-Override Engagement or LINE for short. L.I.N.E. was designed as a "learned system of close combat techniques" and was intended to use multiple repetitions under realistic conditions to take the Marine's close quarters

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[140] Simmons, p. 62.

[141] U.S. Marines Close Quarter Combat Manual. (Paladin Press: Boulder, 1996), p. 1. Note that this is a civilian/commercial printing of the USMC manual, but is virtually identical to the original Navy issue.

[142] Ibid.

[143] Ibid., p. 3.

techniques to an "instinctive level".[144] The system itself was broken down into six LINEs as follows:

a. L.I.N.E. I – wrist locks and counters to chokes

b. L.I.N.E. II – counters versus punches and kicks

c. L.I.N.E. III – unarmed defense versus knife

d. L.I.N.E. IV – knife fighting

e. L.I.N.E. V – removal of enemy sentries

f. L.I.N.E. VI – unarmed defense versus bayonet attack[145]

Bayonet fighting itself was also taught backed by an understanding that

> *…the bayonet still has a place in the modern battle's arsenal of weapons…In situations where friendly and enemy troops are closely intermingled and rifle and grenades are impractical, the bayonet becomes the weapon of choice.*[146]

While the USMC close quarters programme had made some important updates to training in the 1990's, many concepts remained from previous systems and long-term Cold War thinking.

A milestone in USMC close quarters training, *MCP 3-02B Close Combat* was approved and issued in February 1999. As rightly noted in the foreword, this text has "significant differences" from previous USMC manuals and takes the necessary steps to match the present and potential operational environment with the close quarters training programme. There are two notable features of the latest USMC programme and they will be considered here with salient sub components.[147]

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[144] Ibid., p. 1.
[145] Ibid.
[146] Ibid., p. 133.
[147] USMC, Close Combat, (February 1999), Foreword, p. 1.

First, the programme is based on a clear understanding of the Continuum of Force as shown in the chart below.

Figure 4.2 – United States Marine Corps Continuum of Force

Continuum of Force		
Level	**Description**	**Actions**
1	Compliant (Cooperative)	Verbal commands
2	Resistant (Passive)	Contact controls
3	Resistant (Active)	Compliance techniques
4	Assaultive (Bodily Harm)	Defensive tactics
5	Assaultive (Serious Bodily Harm/ Death)	Deadly force

Note: Shading indicates levels in which Marines use close combat techniques.

This chart is similar to those used to train police and security forces regarding applicable laws concerning use of force.[148] For the Marine/soldier, this understanding is fundamental, as Rules of Engagement will, as a general precept, stipulate the use of minimal force required. The chart and the associated techniques allow the Marine/soldier to better access those techniques that should prove most effective and are also within the generally accepted "reasonable man"[149] standards. It is important to note how the span of techniques now covers the entire spectrum of opponent and Marine action. Significantly, this takes the close quarter system beyond the important but relatively narrow scope of combat and into a fuller spectrum of operations. Ironically, the USMC continues to call the system Close Combat, when 'Close Operations' might be a more suitable description of the span of implementation. Following the Continuum of Force logic, the new system

[148] Ibid., p. v.

[149] Christopher Dunn and Kevin Pell, "English Law and Self-Defense", Fighting Arts. com, www.fightingarts.com/reading/articles.php?id=296. The 'reasonable man' concept comes from English common law. It is based on the idea that any force used must be of the amplitude and order that would be considered reasonable by a reasonable man in a similar set of circumstances/conditions. Further escalation of force is allowed, but only according to the threat.

teaches more techniques designed for control by way of pressure points and still covers a wide range of lethal and non-lethal techniques. Bayonet fighting with pugil stick practice is still encouraged.[150]

The second major feature of the 1999 USMC Close Combat programme is the development and 2000 implementation of the Marine Corps Martial Arts system (MCMA). This unique aspect was designed by Master Gunnery Sergeant Urso and a team of seven senior USMC Close Combat instructors with civilian assistance/advice to overarch the Close Combat programme and enhance its teaching success while reinforcing core USMC values throughout training.[151] For example, one of the introductory guided discussions of the MCMA considers transformation as follows:

> *The transformation process is that of making a Marine. We take young civilians and turn them into warriors. This is not something new. It has been occurring since the formation of the Corps. We take enthusiastic young men and women who volunteer to become Marines and we instill our ethos into them. This transformation begins with the fires of recruit training and officer candidate school where we forge the base metal and begin to shape it. But it does not end there…No it must be constantly honed and tempered for the remainder of the Marines career.*[152]

The MCMA package covers a wide variety of topics from ethics and Marine Corps values to the harsh realities of close combat to the building of cohesion, fighting spirit and morale. Additionally, the system builds on the Close Combat package by setting martial arts-style belt colours as well as instructor qualification and currency standards.[153]

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[150] Ibid., pp. iii-iv.

[151] Marine Corps Martial Arts Program Briefing Package and Power Point Presentation. (Department of the Navy. Headquarters United States Marine Corps: Quantico).
and
Major Christian L. Nicewarner, "The Marine Martial Arts Program and the Training of One Rifle Company," Marine Corps Gazette, December 2001. pp. 14-15.

[152] Marine Corps Martial Arts Program Briefing Package and Power Point Presentation, Guided Discussion on "Sustaining The Transformation and Cohesion".

[153] Marine Corps Martial Arts Program Briefing Package and Power Point Presentation.

Of note, two rifle companies undertook a trial training package in 2000. In twenty-five days training eight hours per day, a complete rifle company completed the training which qualified each officer/Sergeant and above as an instructor trainer, each Corporal as an instructor and each Marine as a grey belt (equivalent to 1st class basic qualification). The programme entailed both "hard" skills (basic techniques of the system) and "soft" skills (discussions of martial culture, combative behaviours in humans, etc), which provided the "often overlooked aspects of the profession of arms, as well as a link to the warrior societies of the past"[154]. After the successful training trial, the company returned to its base where it was tasked with training the rest of its battalion. At the unit, a two-week training period per company was undertaken with considerable success. Of import, training at the unit focused more on mental and physical toughness and some of the "soft skills" were unintentionally overlooked or minimized. Additionally, a few months after the trial was complete, the initial trial company reported a loss of almost 50% of its training cadre due to normal rotation of troops from unit to unit and base to base.

Despite the reality of competing priorities, the trial produced some key results, including increased confidence, better-controlled aggression, improved unit cohesion, and a sustainment of a warrior culture. Additionally, important changes to Marines' conduct were also noted; namely, relatively quite and reserved Marines gained more confidence and skill while more outgoing Marines gained a calmer and steadier attitude.[155] On completion of the trial, the company commander noted that while the

[154] Nicewarner, p. 17.
[155] Ibid., p. 16.

MCMA was "not a panacea that will solve all of our problems" it was worthwhile in making "better warrior and combat ready units"[156].

Clearly, the USMC Close Combat/MCMA programme is a unique and interesting development in military close quarters systems. Indeed this system has provided a number of facets for the developing 2003 Canadian Forces system. Salient features remain a full spectrum training package backed by a comprehensive consideration of qualification and currency issues, and a forum to deal with ethics, core values, and other "soft skills".

Overall, the American military struggle with the topic of close quarters training over the last three decades should be rather illuminating to the CF as it wrestles with many of the same issues. First, the CF should not be particularly disappointed that its training had somehow been overcome by events as each of the elements discussed from the world's only super power faced a similar problem. Second, the ability of the various US service branches to transition to overcome the system flaws and create new and vibrant programme should provide a certain level of confidence and hope for success within DAT and the CF, regarding close quarters operations. One area of expertise that the American forces have considered and used to their advantage that has generally been overlooked by the CF has been civilian/commercial sources. It is this area that will be considered next in a brief review.

CIVILIAN/COMMERCIAL SYSTEMS

Having completed a consideration of a variety of military close quarter systems, the discussion will now proceed to include four civilian/commercial-based systems.

[156] Ibid., p. 17.

While this may seem originally like some form of heresy, there should be no doubt that civilian systems do have something to offer the CF regarding the development of a new and effective close quarters system. Indeed, many of the military examples reviewed had some aspect of programme contribution by civilian input. Civilian groups for discussion are, in no particular order, P.P.C.T., C.D.T, Crucible, and R.E.A.C.T.

P.P.C.T.

P.P.C.T. or Pressure Point Control Tactics is a use of force training company that was established in 1980. Specializing in training security and law enforcement personnel it has based its training on "the components of acceptability" stemming from "documented tactical, legal, and medical research".[157] Programme techniques are relatively few, with an emphasis on proven usability and effectiveness in real situations.[158]

Figure 4.3 – P.P.C.T. Logo

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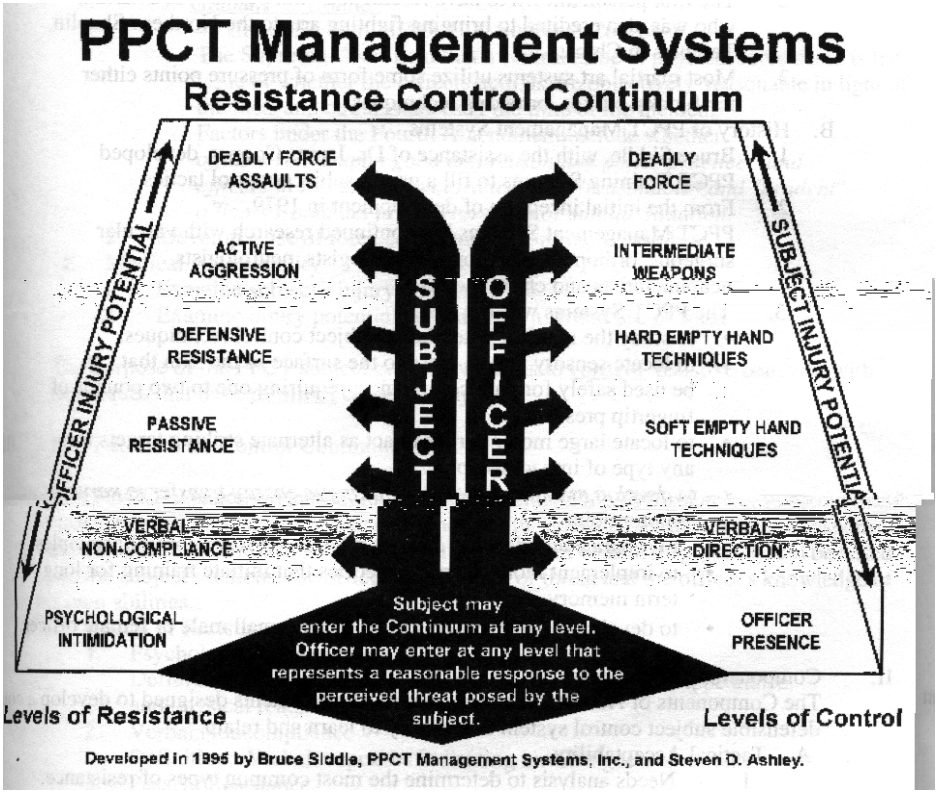
[157] Bruce K. Siddle, P.P.C.T. Defensive Tactics Instructor Manual, U.S. Ed. (PPCT Management Systems: Millstadt, 1999), p. 1-1.

[158] Siddle also concedes that most if not all P.P.C.T. techniques are nothing particularly new, but rather 1000 to 1500 year old techniques with new elements of scientific and field research. Ibid., p. 103.

[159] Siddle, ibid.

Similar to the Continuum of Force chart used in the latest USMC programme, P.P.C.T. courses and training are based on a clear understanding of the Resistance Control Continuum shown here:

Figure 4.4 – P.P.C.T. Resistance Control Continuum



160

Course topics include pressure point control, defensive counter strikes, baton use, spontaneous knife defence, tactical handcuffing, weapon retention and defense, tactical firearms (shooting), shoulder pin defence, violent patient management, inmate control, and close quarters combat. Each portion of training is approximately eight hours long and is generally completed with both written and practical tests. Comprehensive manuals, updated on a frequent basis, are issued to students for further review and study. Finally,

[160] Ibid., p. 3-23.

currency on basic level courses must be renewed each year and currency for instructor level courses must be renewed every three years (provided skills are used frequently in the running of basic level courses).[161]

While most course aspects are purposely designed for security/law enforcement and may have only partial application to military training and application, P.P.C.T. training has number of important features for consideration. First, all training is backed by ongoing field studies and research which provides an important validation and update system for continual development. Next, a considerable amount of training time and manual text is dedicated to the topic of human reactions/actions under stress. Theories on survival stress, heart rate, sympathetic and para-sympathetic nervous system, reaction process and time, and energy systems are covered in some detail and are particularly relevant for any close quarters operations. Moreover, training also seeks to enhance the understanding of methods to control stress effects (mission commitment, technique confidence, motor skill selection, neural programming, breath control, and personal values). Finally, P.P.C.T. training promotes the use of demanding and realistic training to employ and validate theoretical discussion topics. Stress inoculation drills are encouraged to rehearse training scenarios with simulated survival stress elements.[162]

P.P.C.T. provides some interesting and useful areas for consideration for a new CF training system. Specifically, a research-based format with an active feedback and amendment system is important. Likewise, the theoretical and practical understanding of human stress reactions could prove invaluable.

[161] Ibid., "Organizational Review".
[162] Ibid., Chapter 2 – Survival Stress and Performance.

C.D.T.

Tom Patire created C.D.T., Compliance Direction Takedown, in 1992 after 3 years of background research. Originally designed for security and law enforcement personnel, the company has also branched toward personal and family protection. With the motto "Less is better"[163], C.D.T. basic principles include personal safety, subject well-being, and full-circle liability. The two major premises of training are that less than 1% of North American's do any form of martial art over the long-term and that 95% of encounters are very low level situations; therefore, training is designed in short blocks of two to ten hours and focuses on low level force. Clearly, this aspect of the training has an 'average civilian on the street' flavour; however, its low level techniques, simple yet effective, could be useful for certain situations encountered by soldiers in OOTW.[164]

Figure 4.5 – C.D.T. Logo

Much like P.P.C.T., C.D.T. courses are a mix of theory discussion and practical application, including drills to simulate survival stress. Students receive a manual that contains the main theory topics but does not denote specific course techniques. In order to support currency of technique, students are required to return at least once per year (but recommended much more frequently) for refresher training in person. The

[163] "CDT – Less is Better", Action Martial Arts, Issue 29, November 2002 to January 2003, pp. 14-15.

[164] Tom Patire, CDT – The Art of Non-Deadly Force, (CDT Training: Elmwood Park, 2002), pp. 4-6, 11.

programme is also backed by ongoing research and has a clearly defined system for comments and recommendations for amendments.

While the system initially has a more civilian slant to training than even P.P.C.T., for example; President and Founder Tom Patire, has personally confirmed the following:

a. C.D.T. has and continues to train various US and allied military groups

b. C.D.T. has the expertise and experience to formulate new and unique course packages to meet any group needs

c. C.D.T. maintains the desire to undertake the "privilege" to aid soldiers in training and to provide "the best of the best in realistic tactical training to keep them safe"

d. beyond C.D.T. training, potentially suitable for Military Police, peacekeepers, armed reserves, and embassy staff, the same company offers

    (1) L.R.T. (Last Resort Tactics) for special operations groups and deployment teams. This course is based on in-close and silent techniques for "5-7 second" takeouts

    (2) Weapons Access training for covert operations teams that deal with "delicate situations" [165]

Clearly, with its fundamentals in realistic training employing proven techniques with minimal effort and force, C.D.T. does indeed have some useful aspects for consideration in the development of any new CF close quarters programme.

[165] Thomas Patire, Founder and President of CDT. E-mail correspondence. (April 2003).

The Crucible

The 'Crucible' is one of many civilian training camps designed to train security and law enforcement specialists. Its stated emphasis is on realistic and challenging training with a unique "situational self-offense"[166] concept. Confrontation awareness, early detection, de-escalation/avoidance, and 100% commitment, if all else fails, are the main principles. This system employs both theoretical and practical development of such key psychological and physiological topics as human nature; startle response; denial and panic; adrenaline rush versus fear; concern for the unknown; and, visualization. While some of this system's emphasis and techniques may be other than that required by the Canadian military, there are certainly aspects from this programme and/or those it represents that may be of use, particularly regarding human actions/reactions during confrontations at close quarters.[167]

R.E.A.C.T.

R.E.A.C.T. stands for Recognize, Evaluate, Alternatives, Concentrate, Terminate. This civilian training system is based on an understanding in the differences between martial arts, which are life long pursuits that may or may not be useful in real situation; self-defense, which is generally shorter burst training designed to help avoid and protect from violent situations; and, combat, which is the active seeking and destroying of specified targets. Another system fundamental is an understanding of the threats represented by various distances. For example, according to the R.E.A.C.T. system, the

[166] E. Lawrence, "Forged at the Crucible," Black Belt, November 2002, p. 70
[167] Ibid., pp. 70-74.

Red Zone is a high-risk area that encompasses a one-metre circle around the individual; the Orange Zone is a medium risk area that encompasses a four-metre circle around the individual; and, the Yellow Zone is a low risk area that encompasses a fifteen-metre area around the individual. For realistic training considering human survival stress responses, R.E.A.C.T. is linked to a second system called S.P.E.A.R.S. or Spontaneous Protection Enabling Accelerated Response. Again, while this system will not likely provide an exact fit for any future CF close quarters programme, it does provide some useful areas for consideration and/or inclusion.[168]

Chapter 5

INITIAL RECOMMENDATIONS

Having taken a rather lengthy look at a variety of military and civilian systems to provide some additional context, this discussion will move to consider the main features desired in any new CF close quarters operations programme. Before arriving at that stage, however, some additional comments and recent examples of the real and immediate state of the CF close quarters training programme, up to and including late 2002, will be examined.

The CF newspaper, *The Maple Leaf,* published an article on October 2002 describing the "launch of a pilot project aimed at testing a new martial arts program for the CF".[169] As described in the article, this project was headed by Bombardier Philip

[168] Steve Collins, Think, Act, Stay Safe, (Harper Collins: Glasgow, 2001), pp. 15, 24, 67, 99.
[169] Najwa Asmar, "Artillery and Karate," The Maple Leaf. 30 October 2002, p. 15. (and reprinted in THE LOOKOUT, November 2002.)

Gignac of 5e Regiment d'Artillerie Legere from CFB Valcartier. As a former national champion and international competitor of full contact karate, Gignac was granted approval from the command element at CFB Valcartier to train forty soldiers from the unit over a six-month period during a tour in Bosnia-Herzegovina. Looking "to improve the ability of soldiers to engage in unarmed combat against multiple adversaries, even when extremely tired or weighed down by heavy equipment", the programme consisted of four two-hour training sessions each week for six months.[170] Considering many forms of close quarters combat, the training included defence against knives and firearms as well as the use of weapons of opportunity, such as soldier helmets. According to the article, trial results were submitted to "military authorities" for consideration in regard to a new close quarters training system.[171]

While the concept of this trial seems benign enough, it clearly indicates the state of close quarters training in the CF. Despite the obvious skills and good intentions of Bombardier Gignac, it should strike the reader as odd that he would be allowed to use the time of forty soldiers eight hours per week during an operational deployment to trial a potential CF programme. Despite the potentially valuable training for the soldiers involved, this type of event has dangerous implications for CF training as there is no indication of a systemic allocation of training parameters or validation criteria, by DAT or any training authority. Consider, for example, if the partially trained pilot project soldiers had found the requirement to use certain techniques during the operational tour, which were considered outside the accepted levels of force. In such a case, while they may have been prepared in a physical skills realm, such a project may

[170] Ibid.
[171] Ibid.

have inadvertently prepared them for failure in the larger operational context. In closing, this project has some clear similarities to the 1983/1989 programme as a personality-based event. Certainly, a new system should look to harness and regulate such talents and ideas to the benefit of the CF as a whole.

A second useful example comes from 2 RCR (the reader may recall this battalion from the introduction) during the command of Lieutenant-Colonel (now Colonel) Doug MacLean. During his tenure as Command Officer, Colonel MacLean, a qualified and skilled Tae Kwon Do black-belt instructor, led a special training programme that included the entire unit. Seeing "a need for a more refined/structured training regime for Infantry soldiers", he also found himself in a unique position to impact the close quarters training.[172] Notably, after securing support from the local headquarters (Combat Training Centre, CFB Gagetown), he contacted Tae Kwon Do Founder General Choi Hong He and Master Phap Lu who both agreed to support his ambitious training programme at 2 RCR. Over a two-year period, Colonel MacLean conducted numerous training sessions with the entire battalion with excellent results – "It was an excellent training tool, enhancing fitness and flexibility…it was an enhancer of the unarmed combat capability for the entire unit".[173] Additionally, during his time as Commanding Officer, Colonel MacLean, with the experienced and skilled help from Founder Choi and Master Phap, oversaw the training and grading of thirty-two soldiers to 1st level black-belt and six soldiers to 2nd level black-belt. Interestingly and perhaps disappointingly, the 2 RCR 'success' was gained outside the realm of DAT sanctioned close quarters training. Colonel MacLean did consider the CF Unarmed Combat programme to be "okay, except that instructors are

[172] Colonel Doug MacLean, former Commanding Officer of 2 RCR. E-mail correspondence. 10 March 2003.

[173] Ibid.

not qualified enough to teach it, and therefore (as a result of unqualified people in charge) far too many people are injured in training."[174]

Like the first, this example also serves to show the high level of skill, initiative, and dedication to improving close quarters training within the CF. At the same time, it clearly indicates a certain level of frustration and discomfort with the programme that existed until 2002. Colonel MacLean concludes his notes with three recommendations that could serve the CF well: ensure instructors are well qualified and trained to teach; make training mandatory; and, ensure that participants train regularly.[175] Again, the message here for a new close quarters system seems to be there is interest, there are skills, but both need to be harnessed into an accepted, regulated, and properly supported training system.

The third and final example at this stage comes from a particularly useful and relevant operational source. Lieutenant Colonel (now Colonel) Pat Stogran recently commanded the 3rd Battalion, Princess Patricia's Canadian Light Infantry (3 PPCLI) on operations in Afghanistan and has offered some interesting comments. As a martial arts practitioner and wrestler for some thirty years as well as a combat arms officer with unique command opportunities, he also has an acknowledged keen interest in the topic of close quarters training.[176] From his viewpoint, Colonel Stogran cites the overriding requirement for a training system that teaches soldiers the realities of fighting and

[174] Ibid.
[175] Ibid.
[176] Lieutenant Colonel Pat Stogran, former Commanding Officer of 3 PPCLI. E-mail correspondence. 30 October 2002. Of note here, is a second senior officer with skills and interest in close quarters training…consider this with regard to the rank and skills of those influencing the latest programme in the close to Chapter 6.

winning. Rather than supporting individual arts or individual skilled practitioners[177], he insists that close quarters research should start with " a bunch of Ultimate Fighting Championships tapes, Pride or Rage in the Cage – any of the No Holds Barred Competitions – to see what works and what doesn't in a F-I-G-H-T". [178] From here, he recommends a system based on both stand up skills and ground fighting, with an emphasis for the latter regarding ease of learning and contributions to strength training for soldiers. Additionally, Colonel Stogran makes the following recommendations for close quarters training in the CF;

a. conduct of entry level training at Trade Qualification Level 3 (Trade Battle Schools, for example) to include take downs and breakfalls with a view to participation in "Down/Up/Out (DUO) competitions"[179]

b. the Army should stage and support inter-unit and national level DUO competitions

c. unit close quarters training should consist of "A VERY FEW BASIC submissions, strikes and weapon self defence WHICH ARE PRACTICED, PRACTICED, PRACTICED"[180]

d. the Army should participate in activities linked to such organizations as the Canadian Amateur Wrestling Association and CISM recognized combative sports

[177] Colonel Stogran alludes to the first example with Bombardier Gignac as an issue for of some concern.

[178] Stogran, ibid.

[179] Indications are that these competitions are similar to Parachute Regiment milling with suitable safety equipment and supervision. Colonel Stogran conducted such competitions as CO 3 PPCLI with apparent good results.

[180] Stogran, ibid.

Two final comments complete Colonel Stogran's strong views on close quarters training. First, he notes that he has become "very discouraged with how objective military officers, even with no martial arts background, have been snowed by so-called martial arts experts who are promoting a bias rather than balance in UAC [Unarmed Combat] training". Second, "My experience with UAC in 3 PPCLI is that a hockey player using the left-hand-jersey-grab/right-hand-pile-driver would kick the sh*t out of most martial artists."[181] Colourful descriptions aside, Colonel Stogran's main points are clear – a new and better reality-focused system is required; careful consideration must be given to what will actually work for soldiers; those overseeing the system must make sure they better understand what they are supporting; close quarters training must be taken seriously throughout the Army; and, competitions could and should become important training forums.

If nothing else, the three preceding examples provide an update to the realities of the close quarters system (or lack there of) in existence as of late 2002. With these realities and examples fresh in mind, this paper will now move on to consider some key issues for development of a new and successful close quarters training package. Essentially an outline of the '5W's +H"'(who, what, when, where, why, + how, but not necessarily in that order) will be summarized. As Dr. Tom Racey rightly points out "You should always have a clear intention before interacting with anyone or anything. This intention can be flexible as things unfold, but you need to know why you are doing what you are about to do.[182]" Indeed, in order to best resolve this (or any) issue, it is important

[181] Ibid.

[182] Racey, Dr.Tom. Concepts in Self-Defence:Strategy, Tactics and Techniques. (Royal Military College of Canada. May 2001), p. 1. It should be noted here that Dr. Racey is a Physics professor at RMC, Kingston who also happens to be an exceptional instructor of martial arts. As such he is a particularly good

to understand the 'why' and the desired end-state from the outset and at each stage of the process.

Why?

Earlier discussion of national mandates confirmed that the CF must always be prepared to deploy effective, multi-purpose, combat capable forces to promote Canadian interests and values, contribute to international peace/security, and, in the worst case, protect the sovereignty of the nation. The historical context suggested that not only will conflict continue as part of human existence – Only the dead have seen the end of war, according to Plato, but also, that close quarters operations has always been and will continue to be a component of greater military operations, domestic and abroad. Consequently, the 'why' of the system has to be **to provide a useful and realistic training programme to enhance the capability of CF personnel to operate successfully in a close quarters environment across the wide spectrum of potential future operations**. Stacked against this understanding are elements of the legacy of at least the last twenty years of CF close quarters training. As noted earlier, the American experience was not much different as articulated by a US Army Sergeant, "What we did not have was a solid Army-wide combatives program that prepares soldiers for the modern battlefield and the reality of life-or-death fighting".[183] While the span of training and use may have an expanded context from the life/death end of the spectrum, the concept is close to the issue that the CF must resolve.

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example of a relatively untapped potential information source. The Author suggests that the CF close quarters programme could greatly benefit from his input and the input of others like him.

[183] Clark, p. 30.

Who?

Keeping the 'why' to the forefront of all consideration, the 'who' of new close quarters training system will be tackled next. That is to say, who should participate in the training; who should instruct the training; and, who should control/direct the training? Each of these questions will be dealt with in the order presented. While traditionally, close quarters training has generally been reserved for those combat arms army units (infantry, armoured, artillery, engineers, and special forces) that have had the highest expectation of close contact with adversaries, the discussion on the recent past, present and future should have clarified the realities and potential realities of this issue. Certainly, there is now a far greater span of groups who could potentially use the close quarters skills provided by a new training system. A quick, but likely far from definitive, list could include the following:

a. ship's boarding parties
b. military police[184]
c. air force personnel responsible for aircraft or airfield safety
d. aircrew who may require escape and evasion
e. service support personnel required to travel without escort to conduct their duties

[184] According to Captain K.B. Schneider, Officer-in-Charge Advanced and Special Training @ CF Military Police Academy. E-mail correspondence. December 2002., the CF MP use of force programme is linked closely with the Ontario Provincial Police, the Royal Canadian Mounted Police and the Nova Scotia Department of Justice. While the MP use of force package is continually updated and amended, Captain Schneider also confirmed that it is not linked to any other CF or foreign programmes. Certainly, CF MPs could benefit from and add to the discussion of close quarters operations for the entire CF.

f. rear echelon personnel susceptible to enemy deep operations

g. special operations teams[185]

h. female personnel who may face particular risk in certain culturally different operational regions[186]

i. Disaster Assistance Response Team personnel who could be required to deploy on short notice in Canada or around the world

j. reservists who may deploy on domestic or overseas missions in a wide variety of roles but may lack certain levels of background experience

k. senior officers who may be susceptible to personal threats during operations in certain overseas theatres[187]

Given this lengthy yet likely incomplete list, which purposely does not include the combat arms forces who are already given priority for such training, considered against the backdrop of the direct and indirect benefits of close quarters training, it seems that virtually every CF member could improve their effective deployability with such training, albeit with the potential requirement for various levels. Moreover, the indirect benefits noted earlier could alone render such training a valuable developmental and motivational source for even those personnel not considered for operational deployment. Therefore, up to 60 000 personnel of all ranks and trades could be expected to participate and gain from a new close quarters operations training system.

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[185] While a reliable CF special operations representative confirmed a vibrant and ever evolving close quarters programme, security precludes any details in this forum.

[186] While this may seem somewhat archaic and potentially chauvinistic, Spears (p. 136) notes certain special psychological and physiological features unique to training women for close quarter operations.

[187] While this may seem an unlikely venue, corporate VIP training programmes would indicate otherwise.

Following the logic that close quarters programme students could potentially be from all trades and services, instructors should also be from a diverse cross-section of the CF, much like those employed at recruiting and recruit training centres. Clearly, competency, currency of skills, and teaching ability should be the overriding factors for instructor selection, vice outdated notions of regimental or corps affiliated selection. Notably, it will also be important to actively support and foster participation of officers and senior non-commissioned officers in all aspects of training and instruction, if the new programme is to remain sustainable over the long term.

Considering the span of potential participation across the land, air, and maritime environments, control and direction of the programme should be centralized at the CF level. While the Land Force has generally led the way for close quarters training and operations for some time, there has been a general lack of potentially beneficial input and/or coordination with the other environments. It must be understood, therefore, that in order for any future programme to take training to a new level, close quarters training should not be merely an army-centric set of courses with a few token participants from the air and maritime elements, but rather a joint package designed to enhance the operational capability of the entire CF.

A final "who" relates to who can and should contribute to programme development? Rather than the relatively closed system used up to this point in time (with some exception by the 2003 Close Quarters system which will be discussed later), the contributors could and should be increased. Potential programme suggestions should come from all vested interest/participant groups as a starting point. Additionally, discussion groups with allied nations could provide valuable input for a Canadian system,

which could keep it more current and more interoperable with other systems. Exchange postings, even on a short-term rotational basis, to other related schools could also provide useful system input for ongoing validation and development. Finally, as many other systems have done, CF close quarters training should not shy away from seeking some civilian input and/or selected advice. Likely, many if not all, groups discussed earlier would be interested in providing some of their specialist advice and/or training in the development of the Canadian system. With some careful consideration and articulation of CF requirements followed up by technically astute training over-watch, civilian input could provide substantial benefits to programme development, maintenance, and updates. A final source for civilian experience and contribution could come from CF members already skilled from outside sources. Harnessing and cultivating the civilian skills of serving soldiers could add considerably to any new programme, while providing a venue for potentially rewarding contributions by the soldiers.

What?

Keeping the 'why' and 'who' in mind, the next "W" for consideration will be the 'what'; that is to say, what should the programme teach? The earlier consideration of related military and civilian programmes indicates a requirement for a set of useable and effective techniques linked carefully to a theoretical basis for techniques and certain key elementary topics. Interestingly, it is the Author's firm belief that the system techniques themselves are actually the easier portion for consideration in many ways. For example, most civilian and military programmes purposely support using a synthesis of the useful

techniques to gain the 'best' elements from many sources.[188] This is a reasonable basis for starting technique selection. Additionally, most systems studied grant that both stand up and grappling techniques are required. History also indicates that the bayonet is a readily available and generally useful psychological and physiological military weapon, so it could be included too. The bayonet off the weapon is a knife, another potential aspect for training. OOTW in its essence means having to use minimal force while war fighting/combat may require lethal techniques. In either case, or somewhere in between, Canadian law into the foreseeable future will insist that the CF use minimal force on all operations; therefore, a broad span of lethal and non-lethal techniques will be required. Further, baton use to pressure points/nerve centres can be an effective non-lethal control means so associated techniques could be included too. In the final analysis, however, system techniques must be linked to the potential missions and expected operational environment as articulated earlier.

Potentially, the more important and more complex issue is 'What theory should be taught to support the programme?' Certainly, the effects of survival stress on humans should be studied, to include fight/flight reaction, psychological effects of stress, basic motor skills and effects of stress, energy system use/availability, stress effects on information processing, arousal/hyper vigilance/panic and techniques for reducing/controlling stress reaction. These topics are indeed critical to a true understanding of the issue of close quarters operations and will be considered in some detail in a later section on Motor Learning and The Human System.

[188] This is interesting when considering whether to use a system based on a single martial art or not. While most martial arts themselves were developed from a synthesis of useful ideas and techniques, many gain their own momentum over time for a 'purity' of training that often discourages learning things outside the specific art skill set. In some ways they become like certain modern religions where the basic precepts are largely overridden by a requirement to maintain the organization itself.

Discussion of the basic human reluctance to kill or injure other human beings and the stresses caused by operating in such an environment is a developing and important topic.[189] While some might think that the natural human aversion to killing other humans can simply be trained out of soldiers, recent research indicates otherwise. While training can certainly overwrite a variety of innate actions, the actual process and results are anything but simple. Important sources in this area include Richard Holmes' book *Acts of War* [190] and Dave Grossman's *On Killing*[191]. While there is insufficient room in this paper to do justice to this topic, further research and input to any new close quarters training system will be particularly important for operational success. Keegan and Holmes underline the issue in their joint work, *Soldiers: A History of Men in Battle* with "the first lesson to be learned on the battlefield was that the closer you were to the enemy, the less did you hate him".[192] Certainly, the emotional issues relating to the proximity of opposing soldiers during close quarters operations is an area for development, understanding and inclusion in any new system.

Also critical is an understanding of a continuum of force model in concert with Rules of Engagement, Canadian and International Law, the Laws of Armed Conflict, and ethics. While the MCMA system teaches ethics and core USMC values, this may or may not be suitable for a CF system. Clearly the issue for the latter topic is who is responsible for teaching basic CF values and ethics. Overall, this aspect of theory on which to base the whole programme is far more demanding and will require considerable effort to

[189] This phenomenon is not unique to humans as research indicates that it is also extremely rare for animals to kill adversaries of the same species. Wise, p. 9.

[190] Richard Holmes, Acts of War: The Behavior of Men In Battle, (The Free Press: New York, 1985).

[191] Dave Grossman, On Killing, (Little, Brown & Company (Canada) Ltd: Toronto, 1996).

[192] Keegan and Holmes, p. 268.

confirm with any sense of confidence. If nothing else, each of the elements of this discussion paper should prove useful by providing some much needed context in a variety of topic areas.

When and Where?

As they are closely linked and virtually inseparable for the purposes of this discussion, 'when' and 'where' will be considered concurrently. As successful motor learning requires frequent and ongoing practice to properly engrain skills and promote learning, shorter more frequent bouts of training are indicated. Potentially, an initial portion of base-level close quarters training could be given at recruit/officer candidate training.[193] While creating a venue for challenging fitness training and providing useful skills; confidence, cohesion, and morale would be desirable indirect results at this early stage. As soldiers spend most of their careers in units, this would be the next logical place to conduct training. Provided a requisite amount of time, resources, and current/skilled instructors, units could conduct meaningful ongoing training. Instructors and instructor-trainers could be trained at a 'centre of excellence'[194], according to present CF parlance (or as suggested in an upcoming portion, at a Close Quarters Operations Training School). While further discussion on this topic will appear later in a programme recommendation section, suffice to say that close quarters training by its very nature

[193] Notably, the Royal Military College at Kingston has been interested for some time in promoting forms of close quarters training. Unfortunately, up to this point the energetic and genuine efforts have been fruitless, despite some interaction directly with DAT on the issue. RMC staff members are seeking a progressive long-term (four year) programme to better prepare cadets to be CF officers. Peter Nicol, Combatives Coordinator @ RMC Kingston. E-mail correspondence. January to March 2003.

[194] As will be noted later in the paper, Land Forces Western Area Training Centre has been designated as the centre of excellence (COE) for the development and conduct of the new Close Quarters Combat programme.

needs to be taught early, often, and in a wide variety of places to span the potential participant numbers and locations while promoting a definitive chance for success.

How?

Having considered the 'when' and 'where', the final aspect for review is the how. Much like the discussion regarding 'what', the 'how' seems relatively straight forward (and in some ways it is), but there are certainly some new ways of thinking required. For example, while instructional technique in all manner of topics is a mainstay and source of some pride of CF daily routine, some new thinking may be required in order to get the most out of close quarters training, particularly as it could potentially be taught to each and every member of the force and could be useful on each and every mission. The largest point to note for close quarters training is that we are dealing with a human system and motor skills/behaviour which will likely be complicated in operational use by high stress and/or high stakes realities. While most experienced CF personnel may have an intuitive, experienced based knowledge regarding the issue, without further detailed understanding of how the body learns and employs motor skills (potentially under stress), the close quarter programme will not likely achieve maximum success.

Motor Learning and The Human System

Intuitively, it is relatively easy to note that the "motor system receives thousands of sensory inputs and ultimately controls thousands of motor units"[195]; however, to

[195] Daniel M. Wolpert, Zoubin Ghahramani, and J. Randall Flanagan. "Perpectives and Problems in Motor Learning", Trends in Cognitive Sciences, Vol. 5, No. 11, November 2002. p. 491.

indicate the complexity of a seemingly simple issue, consider the following mathematical illustration from Daniel M. Wolpert and his associates:

a. in the human body there are approximately 600 muscles that could be actioned for movement
b. each muscle can either be contracted or relaxed, therefore each muscle can be in one of two states
c. this produces 2^{600} (that is 2 x 2 carried on 600 times) discrete movements - in context, this number is greater all of the known atoms in the universe.[196]

Clearly, the issue of motor learning should not and cannot be taken lightly for close quarters training to achieve maximum success.

Additionally, it must be understood that motor learning has four key parts:

a. it is a process of acquiring capability for producing skilled action
b. it is a direct result of practice
c. it cannot be observed directly but rather only through changes in behaviour
d. it produces relatively permanent change in capability.

Also of note is the body system's capability to take parts of learned tasks and combine them to meet new situations if training is done properly. At the same time, successful

[196] Ibid.

motor learning may require the breaking down of certain innate reflexes and patterns.[197]

Key issues for understanding are the increased levels of retention based on shorter duration/more frequent training events; the simple reality practice, practice, and more practice; and, the requirement for realistic training in order to optimize training success. The first topic really underscores the relationship between multiple exposures to new movements and skills over time; that is to say, the more frequently motor skills are rehearsed, the greater the chance of successful motor learning over the long-term. The second concept simply reinforces the first point, emphasizing the need for ongoing motor skill training in order to maintain and improve desired results. The third and final topic relates to the motor learning concept of 'random practice'; that it to say, in layman's terms, more realistic and varied training scenarios will tend to produce better levels of true motor learning over the long run. Many militaries already employ this principle under the names 'battle proofing' or 'battle inoculation', which also intentionally incorporates high stress levels. During this training, it seems that the brain makes a set of 'files' for access under similar situations.[198] Training for combat success must include varied, realistic and intense experiences in order to "make it as close as possible, replicating its brutality, pressure and sensations with close attention to detail"[199]; therefore increasing the chances of success under real conditions.[200] It should be noted, however, that such challenging training will likely result in more initial errors at the early stages of training due to the increased complexity of the motor skills in use. In the long

[197] Ibid., p. 487.
and
Shillingford, pp. 19-20.
[198] Shillingford, ibid.
[199] McNab, p. 34.
[200] Ibid., pp. 31-33. McNab also alludes (Ibid, p. 38) to the important use of proper breathing techniques to reduce heart rate and blood pressure during high stress situations, allowing for clearer thought processes and higher levels of motor skill and coordination.

run, however, research indicates that such training in a 'learning environment' produces the most profound and lasting motor learning results.[201]

An interesting and important side bar here is a basic understanding of the human system reactions under severe stresses. The Canadian government (on behalf of the population) demands and the CF expects its soldiers to perform well under any and all situations. Given that close quarters operations can contain some of the most intense situations possible, some additional insight into the effects on the human system is key. For example, researchers estimate that close quarters activity is ninety percent mental and only ten percent physical as the inherent fight/flight survival mechanisms spontaneously come into play. As alluded to by some of the civilian system reviewed, issues of sensory exclusion (tunnel vision, tunnel hearing), time distortion, disassociation (out-of-body type experiences), and memory tricks are relatively common events in the conduct of high stress activities. [202]

Moreover, in a simplified version, as the hypothalamus is activated during stress, it sets off a series of hormonal reactions. Adrenaline release into the bloodstream increases heart rate, blood pressure, and respiration while initiating the transfer of priority of blood supply away from the body surface and brain to the systems that maximize muscular effort for survival. Meanwhile, the liver releases stored glycogen to replenish sugar and oxygen depleted muscles. Finally, as the situation is resolved and the stress reduced, the body will attempt to stabilize itself and may go into shock from

[201] Often used in the present CF training context, the 'learning environment' relates to an environment where those in training can feel free to make mistakes in order to learn and develop. Ironically, the present CF system also contains a counter 'learning environment' of 'zero defects', which calls for no errors, even in training. Clearly, this dichotomy of approaches must be mitigated in order to maximize training success.

[202] Jim Wagner, "High Risk – Perceptual Distortions During Conflict," Black Belt, November 2002, p. 36.

overexertion.[203] Whether the situation remains at ultimate stress levels or begins to de-escalate, shaking, dry mouth, nervous voice quiver, vomiting, and soiling can occur as quite natural, but often unwanted effects.[204] Clearly, as the psychological and physiological symptoms of mission stress can be either useful (by increasing alertness, reaction speeds, strength, and endurance) or debilitating (by causing anxiety, confusion and paralysis) to the soldier, they may indeed prove critical to soldier task success or failure.[205] Therefore, such topics must be considered and understood theoretically; and, experienced and mastered practically as elements of close quarters training.

Other topics of note are the stages of motor learning: cognitive, associative, and autonomous and how they are best effected by feedback methods (concurrent, immediate, verbal, accumulated, results knowledge, performance knowledge, terminal, delayed, distinct, verbal, etc). While these issues may seem beyond the scope of close quarters training, they are critical, as background knowledge, if the programme goal is to engrain certain motor skills and thought processes for the soldier to use under potentially the most stressful of situations, with little time to act, no one to seek advice from, and with the knowledge that whatever they do can and will be scrutinized by those not under any of the same constraints or pressures.

The final aspect of the 'how' is really to embrace the challenge of the programme and, within reality, foster a professional, progressive, and responsive system that truly follows the "why" and continually moves towards the end state of the production of better trained CF personnel more able to deal with a wide variety of situations at close quarters. The responsiveness of the system to evaluate itself and to grow with a variety of

[203] Shillingford, pp. 18-19.
[204] Ibid., p. 66.
[205] Ibid., pp. 18-19.

inputs is a critical requirement. In addition to confirmation of skills daily, weekly and at the end of each training course or phase, additional follow up will be required to ensure that the requisite motor skills have been learned and retained. For example, unit training will be required to validate and review previously learned techniques on an ongoing basis. In addition to this method of validating individual skill sets and learning outcomes, the programme will require a concerted effort to consider each individual training success or failure in relation to the entire close quarters training system. Clearly, student long-term retention will indicate either a continuation of sound training concepts or a requirement to re-evaluate training methods and concepts.

At this point it may be useful to recall the 1983/1989 programme. The "5W's +H" as discussed have addressed most of the noted programme failings. (personality-based, lack of senior personnel with knowledge, experience, and credibility, no mechanism for amendment, limited usefulness on OOTW due to war fighting focus, limited access for CF personnel, little influence/direction from the CF or the Land Forces, no incentive to participate, instructor competence and currency, no effort to use civilian skills (including those skills learned and maintained by CF personnel from civilian training)). Consideration of the previous concepts, to include the scientific realities of motor skill learning, will become critical for the creation, implementation, and ongoing development of a close quarters programme which will increase the operational capability of CF personnel.

Chapter 6

A NEW CF CLOSE QUARTERS SYSTEM EMERGES

So what about the new system under construction and designated for implementation in 2003/2004? Understanding the initial premise that the 1983/1989 Unarmed Combat system is flawed as described earlier, the CF Land Forces have already begun to develop a new and, hopefully improved, training system for close quarters operations. While many details are incomplete at this stage, DAT has conducted a working group and an occupational standards writing board on the programme. Unfortunately, the Author was not permitted to attend either[206] but has received copies of the following documents/drafts:

a. Close Quarter Combat Basic Qualification Standard Draft, 2003-01-24

b. Close Quarter Combat Basic Occupational Specialty Specification Draft, 2002-01-01

c. Close Quarter Combat Instructor Qualification Standard Draft, 2003-01-24

d. Close Quarter Combat Instructor Occupational Specialty Specification Draft, 2002-01-01

Of note for the Basic level training, the programme is very similar to both the latest US Army and USMC packages described earlier. While it is difficult to assess the

[206] As an interesting sidebar, the situation surrounding the lack of support for attendance could be considered another example of the marginalization of the importance of Close Quarters operations and training.

training before seeing the manual, it seems that there has been considerable updating of technique range to include pressure points. Importantly non-lethal techniques are specified, as is an understanding of the continuum of force. Interestingly, a maximum of fifty periods (generally forty to fifty minutes each) has been allocated for training duration. Further, the training is "not to be broken down into blocks". Initial indications are that the course was designed for Land Forces personnel only with land-centric missions as a starting point. Finally, the Western Area Training Centre has been designated 'the Centre of Excellence' as the primary authority governing the organization and conduct of the course.

Meanwhile, the Instructor Course has many similar features with an expected higher threshold for learning and the specific requirement to be able to properly demonstrate and teach the techniques. Restricted to qualified non-commissioned officers and officers, the instructor course "should require a maximum of 20 training days" and "will not be broken down into blocks".[207]

Certainly, the latest course design for the Canadian close quarters package has some positive and progressive features. While time will tell the long-term success of this programme, some key issues should be apparent from this discussion. First, there is no expectation for conflict to vanish as part of the human existence. Second, close quarters operations have survived through every era of warfare development up to this point and are expected to have a place in any and all military activities well into the future (and

[207] Interestingly, this actually seems to go against the grain of the motor skills learning concept of shorter more frequent training bouts to promote successful motor learning. In this context, however, it seems that DAT is correctly attempting to ensure a concentrated initial learning stage unfettered by breaks in training, likely due to the competing priorities in the real-world CF. As will be suggested later in some detail, follow up at the unit level will become the critical area of training frequency to ensure and validate successful motor learning of close quarters skills.

indeed as long as humans are involved). Third, as with any aspect of military training activity, close quarters training must reflect an understanding of the operational environment, present and future; moreover, as an endstate, the programme must produce a soldier better able to fulfill his/her missions in support of Canada's lawfully elected government. Fourth, the system must be responsive enough and flexible enough to seek, accept, and institute required changes to keep itself relevant. Fifth, according to the DAT directive from June 2001, the mandate was "to review the present UAC [Unarmed Combat Course] in order to implement an effective unarmed combat program for the Infantry Corps".[208] While a representative of DAT has since verified that the course will be offered to maritime and air elements[209], there is a clear risk of the new system remaining within archaic boundaries rather than rightly expanding to include the broad-based stakeholders considered earlier in the 'who' section. Finally, the system should be one that meets all mandates in the face of all realities and pressures to curtail effective training.

To close out this portion of the discussion, it is important to restate the key element of the "How" initial recommendations; that is

> *to embrace the challenge of the programme and, within reality, foster a professional, progressive and responsive system that truly follows the "why" and continually moves towards the end state of the production of better trained CF personnel better able to deal with a wide variety of situations at close quarters.*

Consider this concept from the Author with the representation at the Close Quarter Combat Qualification Standard Writing Board conducted from 21 to 24

[208] DAT, Memorandum 1006-1(DAT 3-6), p. 2.

[209] Author discussion with CWO Charlebois, 3 April 2003 indicated that the basic and instructor courses would be made available to elements such as ships' boarding parties, etc.

January 2003:

a. of the twelve invitees, all were from the land element
b. of the twelve invitees, nine attended, all were non-commissioned officer in the rank of Master Corporal to Warrant Officer
c. of the four Area Headquarters established in the Land Force, two were not represented at the board (Atlantic Area and Quebec Area)
d. Combat Training Centre, Individual Training was not represented
e. national lead for course development was a Sergeant from Western Area (designated the center of excellence for the programme)
f. other attendees included an infantry Major, an infantry Chief Warrant Officer and a training development Captain, none of whom have any background experience or knowledge of close quarters operations or training [210]

Despite the promising indications of certain fundamental changes to the CF close quarters training system, the entire project balances in many ways on the commitment and support to development, growth, and change. Even within the bounds of CF realities and reason, a critical mass of dedicated and educated effort will be required.

[210] DAT, Draft Memorandum 4500-1 (DAT 3-6-4), Dated January 2003. The Author does not wish to belittle or down grade the professionalism of any or all of the participants of this conference, rather, he would merely like to comment on the relative lack of input from any command element and the absence of key interested parties.

Chapter 7

SOME FINAL RECOMMENDATIONS – LET'S GET OUT OF THE 'BOX'

At this point, having considered a myriad of information ending with a look at the latest close quarters developments within the CF, this discussion will make recommendations aimed at taking the positive changes of the 2003 Close Quarter Combat package, and providing suitable venues, in concert with the initial recommendations of Chapter 5, to take it to an unprecedented level of success. While some of the ideas may seem overzealous and outside the realm of the possible, careful consideration will be made to keep all recommendations within reach and reason for the CF in the present and foreseeable future.

Overall, the basis of these final aspects of recommended change for the close quarters programme anchors on the creation of a suitable Close Quarters Operations Training School, on which the entire system can be properly based. While the creation of such a facility might strike some as odd, consider the Canadian Parachute Centre (CPC) at CFB Trenton.[211] With a staff of approximately eighty-six personnel, headed by a Lieutenant Colonel, this school provides parachute and other specialist training for the CF. On average it trains approximately 600 CF personnel per year on a variety of courses. While they are filling a valuable and unique role in the training system, CPC student output influences a relatively small portion of the CF (with a maximum manning of 60 000), primarily parachute companies in light infantry battalions equivalent to between 500 and 2000 personnel nationally. Considering this, would forming a school that could influence and support training for each and every CF member throughout their

[211] This successful school is only the latest version of a series of schools mandated to train CF personnel in parachute skills since 1942.

career be such a stretch of the imagination? As observed on a "No Fear" t-shirt some time ago, "You can't get to 2nd base with your foot still on 1st!"[212]

In order to provide a venue for discussion and consideration, the chart, commencing on the following page, will consider a variety of features represented by the present establishment at CPC. These features will then be extrapolated to the context of potential aspects of a CF close quarters training programme centred on a Close Quarters Operations Training School. Considered in concert with the recommendations made in the section on the 5 Ws + H and alongside the attempts for improvement of the 2003 system under review and development, these features should provide the impetus and components to maximize system success in both the short and long term.

[212] The author owns such a shirt produced in 1994 by "No Fear" products.

Figure 7.1 – Recommendations with CPC as an example

Serial	Discussion Topic	CPC Example [213]	Consideration for Future Close Quarters Training
1	School establishment	CPC exists as a stand-alone specialist training school.	Consider creating a Close Quarters Operations Training School (CQOTS).[214]
2	Military and civilian links	CPC has close ties with a variety of civilian and military organizations for training and research/development. These associations help to reduce costs for specialist training.	A CQOTS could greatly benefit from formalized links to civilian and military groups for training and research/development.
3	Training and Expertise Levels	For parachuting, CPC maintains and trains at 3 separate and discrete levels: Basic Parachutist (Basic Para), Jump Master (JM), and Parachute Instructor (PI). Both Freefall and Static-line skill sets feature the 3 levels.	For QCO, 3 levels are also recommended: Close Quarters Basic (CQB), Close Quarters Instructor (CQI), and Close Quarters Instructor Trainer (CQIT). Much like CPCs requirement to conduct both

[213] Note that all aspects of the CPC example have been taken from the 2002 CPC In.02 0 0 10.02 470.39282 3 1 1

			static-line and freefall training for different unit & operational requirements, QCO could be taught in more than one vein. For example, certain elements of training might be different for combat arms units vice support units.
4	Currency and qualifications	Each of the training/ expertise levels from Serial 3 feature accepted and enforced qualification standards and currency levels. For example, a Basic Para must jump every 90 days to remain 'current'. If he/she becomes 'uncurrent', he/she must conduct 'refresher' training under the direction of a JM. Likewise a JM who does not dispatch parachutists over a certain time frame, must be re-certified as a current JM by a PI.	Currency levels are critical to maintaining a safe and effective training system. Therefore, currency standards must be set and enforced. Potentially, CQIs could be required to teach every 30 days to be current, after which time they would be required to conduct refresher training and assessed instruction under the supervision of a current CQIT. Likewise a CQIT who has not conducted or supervised training for one year

		PIs are generally considered current unless they leave a jump unit, in which case they must be re-certified by a current PI, before overseeing or conducting training.	could be required to re-certify under a current CQIT.
5	Conduct of Related Courses	As a lead for certain specialist training, CPC conducts related courses like Patrol Pathfinder, Advanced Mountain Operations, Aerial Delivery, and Rappel Master	Likewise, CQOTS could and should conduct related training such as crowd control operations, close quarters battle shooting, etc.
6	Trials and Evaluations	CPC has a small but integral Trials and Evaluation (T/E) section. This allows the school to coordinate with a variety of external sources and internal expertise to consider, develop, and recommend ongoing technical changes.	CQOTS should have a similar in-house capability. This will help to ensure the required ongoing development of the programme, which has been lacking over at least the last 20 years.
7	School Training Mandate and	CPC exists as a specialist school tied into the Combat Training	CQOTS would have to have the same ties to training directives

	Instructors	Centre (CFB Gagetown) and Directorate of Army Training (CFB Kingston) for training requirements and standards. This provides the basis for what is taught, when to whom and how. At the same time, instructors are full time with a high threshold of knowledge and experience.	and implementation policies. At the same time, instructors at the school need to be full time with the highest possible skill levels to ensure the best results for student learning and operational capability enhancement.
8	Training and provision of Instructors to Units	CPC trains JMs and PIs that are subsequently employed at the unit level. This provides an integral training capability within units requiring parachute skills and capabilities.	CQOTS would need to train CQIs and CQITs for units across the CF to allow for ongoing unit training. Additionally, this level of qualification within a unit is a key element for feedback to the school and the training system as CQIs and CQITs can comment on unit training issues from 1st hand knowledge and with the requisite technical background.
9	Annual JM/PI Symposium	CPC generally conducts symposium annually for JMs and	This type of event, at least annually, would provide an

		PIs to refresh their skills as well as discuss required updates or changes to the parachute training system.	excellent venue to ensure that all CQIs and CQITs are as up to date and current as possible. With representation from a wide environments, formations and units, this type of event would also be key to considering, discussing, and implementing required programme updates.
10	Officer Technical Qualification	While some of the officers on staff at CPC are JM qualified, there are none qualified PI. While this relates more to training requirement than anything else, it does create a long-term lack of certain technical skills at the officer level.	CQOTS should seek to train officers, non-commissioned officers, and other ranks on all courses. Officer participation could provide a new impetus for training by providing the key group making command decisions for training and operations with the requisite technical skills to make best use of CQO.
11	Training Location Flexibility	While Serial 8 mentions the requirement and capability of	Considering the previous recommendation that all

		CPC to teach JMs and PIs for unit employment, CPC has little to no ability to conduct training at locations other than at its established location. Due to the limited number of soldiers requiring and employing the parachute skills, this issue is not a particularly troublesome one for CPC.	members of the CF receive some form of CQO training, the proposed CQOTS would have to have a considerable ability to conduct training in units, formations, and bases, away from the school itself. While this requirement would likely subside with time after implementation, an ability to refresh and train at the units would greatly enhance the operational usefulness of the CQO training.
12	Training particulars	CPC parachute related courses combine theory, learning drills, and practical applications under realistic conditions, as well as a fundamental emphasis on motivation and physical fitness (a physical fitness test is conducted on arrival to ensure	CQOTS would need to employ a similar combination of theory, drills, and realistic practical applications in order to best teach effective techniques. Similarly, an emphasis on motivation and fitness should be stressed for system success and

		students are fit and motivated for stressful training. Courses are 15 to 25 training days long with rank, experience, and leadership requirements at each level (Basic Para, JM, and PI).	overall professional soldier feeling. At threshold PT standard should be set and tested on arrival for training. Courses should be of 15 to 25 days duration with prerequisites of rank, skills, fitness, and leadership/instructional ability.
13	Special Summer Courses	CPC is mandated to conduct at least one basic parachute course for Cadets annually. This provides an excellent and challenging training venue for Canadian youth (who may be potential CF recruits).	CQO training could be considered for Cadets in a modified form. A summer serial might prove beneficial for Cadets at the Royal Military College who are ahead of their regular annual summer training schedule.
14	Jump Bivouacs	Prior to the establishment of CPC, the Canadian Airborne Regiment hosted an annual Jump Bivouac. During this weeklong event, dozens of allied militaries sent soldiers to share their	An invitational annual CQO bivouac could be extremely useful in the ongoing development of the CQO system within the CF. Even if a Canadian annual event was not

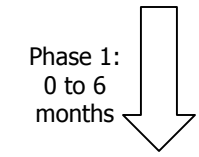
		knowledge and skills regarding parachute operations.	sustainable due to cost and resources, a rotating event with a different hosting country each year could prove useful. This could be tied, in a variety of ways, to the annual symposium discussed at Serial 9 for maximum benefit.
15	Environmental and Joint Links	CPC is clearly a Land Force (Army) training school. It does, however, tie in directly with the Air Force for provision of tactical lift for parachuting. At the same time, CPC has an integral liaison and logistic support staff for conduct of its training roles.	CQOTS could be coordinated and administered by the Land Force on a day-to-day basis; however, it should be considered completely joint with full participation by the land, air and maritime elements. This would also take its training links beyond merely Land Force (Army) to each element and the CF as a whole.
16	Demonstration Team	CPC owns, trains, and administers the very successful 'Sky Hawks' freefall parachute	CQOTS could and should provide a similar demonstration team for performances across

		demonstration team. This team, composed of regular and reserve soldiers from all environments, is a major public affairs success and performs across Canada each year. This team provides a visible and highly sought after link between the Canadian public and the CF.	Canada. Demonstration techniques and scenarios could help to better explain the place of the CF and its operational skills in missions domestic and international.[215]
17	Specialist Skills Badges	CF parachute capabilities are noted with two different badges. A set of jump wings with red leaf indicates a trained parachutist while a set of jump wings with a white leaf indicates a paratrooper who has served with an operational jump unit. There are no special indicators for freefall parachutist, JM or PI.	As CQO is recommended for all CF personnel in one form or another, no basic skills qualification badge is recommended; however, the recognition of CQI and CQITs by way of a simple and discrete specialist badge would increase the recognition of fundamental and important skills.

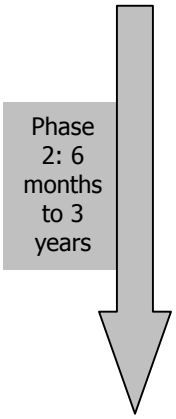
[215] In October 2001, the Author was invited to take a close quarter operations and rappelling demonstration team to perform at a nationally televised Toronto Argonauts game. The event was a great success, showing the skills and professionalism of CF members in a positive and very public light.

Understanding the critical nature of the implementation phase for a new programme, the following timeline and training numbers are offered:

Figure 7.2 – Recommendation for System Implementation



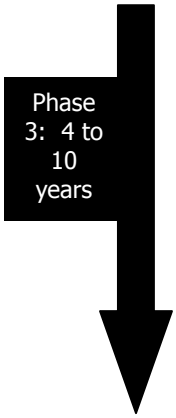
Aim: to set the conditions for future programme success.
Main effort: the establishment of and ground work development of the CQOTS and its staff.
End State: the school is established, all instructors are trained and ready to begin operations.
Note: there are no courses during this phase, except for the school staff.



Aim: to establish a base level of experience and instructor capability across the CF.
Main effort: the training of basic students and instructors.
End State: the school has trained 360 basic, 180 instructors and 30 instructor trainers for units and is ready to begin steady state training. (Based on maximum 8 courses of 15 days per year.)

Courses to be conducted as follows: # = maximum students trained, (#) = courses conducted

	Basic	Instructor	Instructor Trainer	Total
Year 1:	180 (6)	40 (2)	0 (0)	220 (8)
Year 2:	90 (3)	80 (4)	10 (1)	180 (8)
Year 3:	90 (3)	60 (3)	20 (2)	170 (8)
Total:	360 (12)	180 (9)	30 (3)	570 (24)



Aim: to maintain a working level of experience, expertise and instructor capability across the CF.
Main effort: the training of instructors and instructor trainers.
End State: the CF maintains an acceptable level of instructor and/or trainer skills and continues to develop the programme to meet new challenges and operational realities.

Courses to be conducted as follows: # = maximum students trained, (#) = courses conducted

	Basic	Instructor	Instructor Trainer	Total
Total from Phase 2	360 (12)	180 (9)	30 (3)	570 (24)
Year 4 to 10:	90 (3)	60 (3)	20 (2)	170 (8) per year
Total to year 10:	990 (33)	600 (30)	170 (17)	1760 (80)

Chapter 8

SUMMARY AND CONCLUSION

At this stage, a summary of key issues and concepts will be reviewed before the concluding remarks. In Chapter 1, the introduction established, by anecdotes and admission by DAT, that there were certain fatal flaws with the Unarmed Combat training system in use within the CF from 1983 until late 2002/early 2003; further, the thesis statement confirmed that the present system is flawed and must be replaced by an amended and updated programme. After an outline of the sequence of discussion development, some key definitions and basic concepts were resolved.

Next, Chapter 2 considered some key historical context of conflict from the days of the cave man until the end of the Second World War. Separating the timeline into three eras related to concepts of the distance at which battle was engaged, the historic consideration clearly indicated two fundamental issues for the entire discussion of close quarters operation: the first being the historic inseparable link between human existence and conflict/warfare; and the second being the relevance of close quarters skills, in various forms, at each historic stage. Consideration of the unique case of Japan added the aspects of the samurai as the master of individual combat and the contribution of Japanese military arts to a wide variety of contemporary systems. In the final analysis, the historic review outlined the key features of close quarters operations through the ages and provided some necessary background for consideration of such systems and training into the present and future.

Chapter 3 considered the 1983/1989 CF Unarmed Combat programme in some detail with evaluation of its key features, both positive and negative. A look at the recent

past, primarily based on the Cold War experience, helped to place the 1983/1989 programme in the context in which it was designed, introduced, and initially conducted. Occurring soon after the birth of the CF Unarmed Combat programme, the unforeseen fall of the Berlin Wall and collapse of the Soviet Union quickly changed the world paradigm from a bi-polar US-Soviet one to a far more dynamic reality. As most countries sought the peace dividend, the new paradigm saw the establishment of the US as the world's only super power in a world of more diverse and often troubling conflict. Simultaneous to the development of the phenomenon of the 3-block war, the advent of high-technology communications subjected military deployment and use of force to an unprecedented level of instant and far-reaching scrutiny. Legal issues, such as rules of engagement, also came to the forefront as a means of rationalizing and validating use of force to resolve a wide variety of issues. According to trends and most predictions, the foreseeable future will continue to challenge any and all soldiers deployed at home and abroad. Thus, the soldier of the present and future will require a new skill set to operate at close quarters. Canadian strategic direction clearly defines the CF mandate to train and generate multi purpose, combat-capable forces for deployment at any time around the globe; and yet, the 1983/1989 Unarmed Combat system clearly fails to provide the requisite span of theory and technical skills to support success across the spectrum of conflict.

Chapter 4 considered a variety of other close quarters training systems in order to understand the context of development by others. Both military and civilian/commercial systems were considered in order to take advantage of a diverse base of useful information. Each of the military systems examined displayed a certain national flavour

in the development of their close quarters systems. Clearly, the each unique national experience and present context determines the methods by which each trains for and conducts military operations, including at close quarters. Additionally, each military system reviewed seemed to clearly understand the inherent benefits of close quarters training, particularly regarding soldier motivation, fitness, and controlled aggression. Finally, the military systems generally accepted the advantage of creating their systems by taking the best features from a variety of sources.[216]

While the American military systems reviewed were no different in this aspect, they did provide useful allied models for transition to systems more suitable for the post-Cold War environment. The clear articulation of a use of force spectrum within which the soldier operates and the division of techniques into lethal and non-lethal were the fundamental shifts in US military close quarters training. Considered in concert with the concepts of rules of engagement and media/public scrutiny from a previous chapter, these issues provided the basis for useable and effective system development.

While consideration of civilian/commercial close quarters systems may initially have seemed heretical to a discussion of military issues, these programmes did offer some elements of relevant and useful information. While the four sources considered represent only a small segment of an exponentially expanding commercial market for such systems, they did offer several useful common threads. Each system considered is based on a set of relatively simple techniques backed with a clear understanding of the scientific realities of motor movements under high stress and the legal implications of use of force.

[216] While Tae Kwon Do, as a national Korean system, may seem an exception here, historic fact underscores its development from a combination of indigenous Korean and Japanese fighting arts, namely Shotokan karate. It is interesting to note that South Korea does expend some effort in claiming Tae Kwon Do as a 'pure' Korean art; however, most reliable sources do not agree with this view.

While the former may not include the extreme war-fighting context included in military application, and the latter may not fully contain the implications of the Laws of Armed Conflict, the two concepts are useful, and indeed, critical to the development of a new close quarters system for the CF. A final common theme for the civilian training was the application of realistic and challenging drills to maximize training effects. Certainly, this must become a feature of any new CF programme.

Chapter 5 provided a host of recommendations for the development of a new close quarters programme for the CF. Answering the 5 Ws +H, the discussion began with a critical understanding of 'why' – articulated as 'to provide a useful and realistic training programme to enhance the capability of CF personnel to operate successfully in a close quarters environment across the wide spectrum of potential future operations'. From this starting point recommendations were made to deal with some of the problem areas of the 1983/1989 programme, particularly bearing in mind the changing context after the end of the Cold War. Interestingly, it was determined that the exact techniques were not nearly as important to the system as the ability to understand why certain techniques would be suitable and useable in close quarters situations, as well as an inherent programme capability to continually review and update all aspects of training. Last, but certainly not least, was the key discussion revolving around the scientific realities of motor learning and the human system. Granting the fact that close quarters training is really about understanding how to train and develop the human system, this sub chapter illuminated some important aspects of training which may be understood intuitively to some extent, but must certainly be better developed for full programme effectiveness.

After Chapter 5 provided some food for thought regarding a new CF close quarters system, Chapter 6 outlined the basics concepts of the latest programme under development from DAT. While the package is not fully developed or implemented, what is known did confirm some fundamental changes, including a use of force continuum and a better understanding of non-lethal and lethal force issues. At the same time, it became relatively clear that the fledgling system is already challenged by the realities of limited funds, resources, and potentially, flexibility of thought and action.

Chapter 7 attempted to take the consideration of a new close quarters system to a new level. While understanding the realties of the present and near future CF, this discussion decisively recommended the creation of a Close Quarter Operations Training School and used the Canadian Parachute Centre as a useful starting point for extrapolation. Over a dozen programme recommendations were made here to support the 'why' outlined in the previous chapter. Considering everything from specific courses to specialist badges, this discussion attempted to build on many of the ideas which have kept the Canadian parachute training programme as a successful and evolving component of the CF training system since 1942.

In conclusion, there should be no doubt regarding the requirement to consider and implement fundamental changes to the CF close quarters operations training system. Backed with an understanding of historical context, a realization of the present and near-future realities, and a consideration of other military and civilian programmes, development of the new CF system can begin in earnest. Recognizing and accepting the potential importance of close quarters skills to any and all future CF operations, the full

connotation of 'in earnest' – seriously, with determination[217] - must be understood and implemented for success. It seems that just as conflict and warfare are bound to the human experience, so to operations at close quarters will remain a feature of human conflict. In order to make best use of the limited time, money, and resources, while providing the greatest chance of success in delivering multi-purpose, combat capable forces at any time to any location, the CF must now commit to well-considered yet aggressive change. Half measures and interim solutions will not likely serve the soldier or the nation well.[218]

[217] F.G. and H.W. Fowler, The Pocket Oxford Dictionary of Current English, Eighth Edition, (Oxford University Press: Oxford, 1996), p. 272.

[218] In 1990, the Author wrote a lengthy memorandum discussing some failings of the 1983/1989 close quarters progamme and recommending certain fundamental changes centering on the re-design of a more comprehensive and useful instructor training course. While he did not achieve much success in that attempt, the Author still cares, offers and hopes.

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