

VOLUME 1

CONDUCT OF LAND OPERATIONS - OPERATIONAL LEVEL DOCTRINE FOR THE CANADIAN ARMY (ENGLISH)

Issued on Authority of the Chief of the Defence Staff



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Canada

FOREWORD

1. The fundamental role of Canada's army is to defend the nation and, when called upon, to fight and win its wars. The army may fulfil this role through deterrence, which requires the maintenance of forces that are credible and visible in peace and conflict, or through the conduct of combat operations if deterrence fails.

2. Sound doctrine and its effective application are essential for success. Military doctrine provides a common understanding of the nature of conflict as well as the planning and conduct of combat operations. A stronger focus on doctrine and the recognition of its evolutionary nature is necessary to prepare army leaders to conduct military operations in the 21st century.

3 The approach outlined in this manual is consistent with previous Canadian doctrine but builds upon it with new and innovative ideas and concepts. It is different in five main ways. First, the doctrine requires an understanding of the operational level in order to participate as part of a joint and combined force. Secondly, it steers the army toward an approach to winning which is consistent with allied doctrine yet retains a distinctive national flavour. This approach is based on manoeuvre warfare theory and seeks to shatter the enemy's cohesion through a series of rapid, violent, and unexpected actions that create a turbulent and rapidly deteriorating situation with which he cannot cope. Thirdly, it introduces six combat functions that are applicable across the spectrum of conflict and represent the purest expression of the components of combat power. Fourthly, it introduces operational level doctrine for the conduct of operations other than war. Finally, it emphasizes a philosophy of command based on the disciplined use of initiative guided by an understanding of the higher commander's intent. This philosophy is a prerequisite for implementing the Canadian approach to operations, and for coping with high-tempo operations amidst the friction, chaos, uncertainty and violence of combat.

4. This manual covers many aspects common to all levels of conflict, but focuses on the operational level, between military strategy and tactics. To understand the operational level, one must recognize that military action, at any level, should ultimately serve the demands of policy. Tactical military action should never exist for its own sake, but should always be conducted to achieve success at the strategic level. The vital link between the setting of military strategic objectives and the tactical employment of forces on the battlefield is the exercise of command at the operational level, also referred to as operational art.

5. This doctrine fulfils particular Canadian needs and suits the characteristics and strengths of the Canadian soldier, seeking as much as possible to build upon the proud military heritage of the Canadian army. Although rooted in time-tested theories and principles, it is forward looking and adaptable to changing technologies. Precision guided munitions, robotics, digitization, and communications, information and space technologies are changing the means by which war is prosecuted. This doctrine is designed to be sufficiently broad to accommodate such technologies, and sets the conditions to exploit technological advancement in a way that complements the approach to winning. At the same time it recognizes that conflict remains chaotic, violent and unpredictable in spite all of our efforts to decrease uncertainty and reduce friction through technology, doctrine, equipment and training.

6. *The Conduct of Land Operations* is a statement of doctrine, but it is also intended to educate and to open the door to concerted study of the profession of arms. For this reason a reading list has been included. I encourage everyone to read, discuss and critique existing doctrine as this can only lead to its improvement and to increased understanding for those involved in the debate. Memorizing this manual from cover to cover will not guarantee success, but understanding the concepts in the context of practical experience and historical examples will make success more likely.

7. Therefore, to be effective in promoting a coherent approach to operations, this manual must be read and understood by all. As one of our keystone manuals, it is essential reading for all Canadian army officers and students of the profession of arms.

M.K. Jeffery Major-General Army Training Authority

PREFACE

Military doctrine is a formal expression of military knowledge and thought, that the army accepts as being relevant at a given time, which covers the nature of conflict, the preparation of the army for conflict, and the method of engaging in conflict to achieve success.

PURPOSE

1. B-GL-300-001/FP-001 is the Land Force's operational level doctrine. **Its purpose is to establish the doctrinal basis for the conduct of land operations.** Although designed primarily for formation commanders and their staffs, for officers serving on joint and combined staffs, and for use in staff college training, the basic principles elaborated here apply equally to commanders and staff at all levels. To be useful it must be uniformly known and understood.

2. While firmly based upon the foundations established in B-GL-300-000/FP-000, *Canada's Army*, this manual also forms the vital link to the Canadian army tactical doctrine, B-GL-300-002/FP-000, *Tactical Level Doctrine for the Canadian Army*, which describes how the doctrine should be put into practice at the tactical level. In this way, it is intended that commanders at all levels have a common grounding on which to base their plans. This will enhance communication between leaders of all ranks and help to establish a shared professional culture and approach to operations.

3. The content of B-GL-300-001/FP-000 is derived from a variety of sources : government policy, history, military theory, an analysis of trends in technology, the nature of current threats, and the doctrine of allies. Acknowledging the intrinsic joint nature of Canadian Forces operations, this manual is consistent with B-GG-005-004/AF-000 *Canadian Forces Operations* and subordinate CF manuals. It is not based upon, nor does it call for, any particular equipment suite or force structure. It does not depend on specific technologies or numbers of soldiers, and remains applicable in the broadest number of circumstances involving any configuration of joint and combined military forces. It is a doctrine national in context, seeking as much as possible to build upon the military heritage of the Canadian army and the distinct cultural characteristics of its members.

4. This manual explains the Canadian army's approach to achieving success in operations. In doing so, it is descriptive rather than prescriptive, requiring judgement in application. It does not establish dogma or provide a

checklist of procedures, but is rather an authoritative guide, describing how the army thinks about fighting, not how to fight. As such it attempts to be definitive enough to guide military activity, yet versatile enough to accommodate a wide variety of situations.

SCOPE

5. The manual is divided into three parts. Part I establishes the theoretical foundations of doctrine. It describes the nature of armed conflict and establishes the foundations of the Canadian approach to achieving success in operations, including the philosophy of command. It is general in nature and the concepts are applicable at the strategic, operational and tactical levels. Part II focuses on the operational level and describes the design, planning, conduct and sustainment of campaigns. Part III addresses the unique aspects of designing, planning and conducting campaigns involving combined operations and operations other than war.

6. Unless otherwise stated, masculine pronouns apply to both men and women.

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PART I FUNDAMENTALS

Part I of B-GL-300-001/FP-000 builds upon, B-GL-300-000/FP-000 *Canada's Army*, to establish the theoretical foundations of Canadian army doctrine. As such, the concepts presented in this part are applicable to all levels of conflict, and are used to provide the basis for the discussion of the operational level of conflict in Part II, Campaigning. The central theme of this part is the development of the Canadian army approach to fighting and winning in combat operations.

Part I is divided into two chapters. Chapter 1 builds on the Canadian army understanding of the nature of conflict and principles of war described in B-GL-300-000/FP-000. It reaffirms that the object of conflict is to impose one's will upon the enemy.

Chapter 2 explains and develops the Canadian army approach that success is achieved through the controlled and focussed application of the elements of combat power to overcome the opponent's will by attacking his moral and physical cohesion rather than by destroying him physically through incremental attrition. Such themes draw heavily from *manoeuvre warfare theory*, and steer Canadian military thinking in a direction significantly different from previous doctrine.

CHAPTER 1 THEORETICAL FOUNDATIONS

Fighting . . . is a trial of moral and physical forces through the medium of the latter. Naturally moral strength must not be excluded, for the psychological forces exert a decisive influence on the elements involved in war.

General Carl von Clausewitz

SECTION 1 NATURE OF CONFLICT

1. B-GL-300-001/FP-000 established a **spectrum of conflict** to describe the varying states of relations between nations and groups and a **continuum of operations** to describe the range of military responses to peace and conflict (including war). The key elements of the nature of conflict are reviewed here and developed to provide the basis for the development of the Theory of Conflict in Chapter 2.

THE SPECTRUM OF CONFLICT

2. Relations between different peoples can exist in a condition either of peace or of conflict. Peace exists between groups of people and states when there is an absence of violence or the threat of violence¹. Conflict exists when violence is either manifested or threatened.

3. The essence of conflict is a violent clash between two hostile, independent, and irreconcilable wills, each trying to impose itself on the other. Thus, the object of conflict is to impose one's will upon the enemy. The means to that end is the coordinated employment of the various instruments of national power including diplomatic, economic, informational and political efforts as well as the application, or threat, of violence by military force.

4. In conflicts that have proven resistant to both peacemaking and peace enforcement efforts, there may be no alternative left but to embark on a policy

¹ International Peace Academy, New York.

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of **war**. Therefore it can be seen that war is essentially a subset of conflict and not an isolated state. As with peace and conflict, the distinction between **conflict other than war** and war will be blurred. For example, a conflict may encompass a period of war fighting and then transition to prosecution through other means.

THE CONTINUUM OF OPERATIONS

5. The Army classifies its activities during peace and conflict other than war as **operations other than war**. In peace, the purpose of military forces is to take part in activities in support of the civil authorities either at home or abroad, to contribute to deterrence and to train for combat operations. During conflicts other than war, the government may call upon the Army to carry out operations with the purpose of supporting the overall policy to resolve or end a conflict.

6. The military response to war is called **war fighting**. In prosecuting war, one side seeks to impose its will by engaging the enemy in protracted combat with the full economic, political, and social resources of the nation.

7. The continuum of operations also encompasses the concepts of combat and non-combat operations as outlined in B-GL-300-000/FP-000.



Figure 1-1: The Continuum of Operations Projected on the Spectrum of Conflict

COMBAT AND NON-COMBAT OPERATIONS

8. Although focussed on war fighting, the Army's frequent role in operations other than war is critical and cannot be ignored. In military terms there may be little if any distinction between the conduct of **combat operations** in war fighting and operations other than war. Consistent with this approach, this manual will focus primarily on the military aspects of combat operations. As proven repeatedly by Canadian units in peace and conflict (including war), well-trained, properly equipped and well-led combat operations. Those unique aspects relating to the overlap of combat and non-combat operations in operations other than war are discussed later in this manual.

9. Therefore, the general concepts and thought processes described throughout this manual, although emphasizing combat operations, apply to the full range of land operations. No matter what the nature of the next mission for the Army - general or regional war, contingency operations, peace support, nation building, or domestic operations - this doctrine will be applicable.

THE LEVELS OF CONFLICT²

10. The military response to conflict must be consistent with national policy objectives. The translation of policy goals into military action must be done in a way that ensures clarity and preserves unity of effort. Accordingly, military activity has been categorized into three levels : strategic, operational, and tactical. These levels of conflict help commanders to visualize a logical flow of operations, allocate resources, and assign tasks to subordinates. **Each level is defined by the outcome intended - not by the level of command or the size of the unit or formations involved.** While the levels form a hierarchy, there are no sharp boundaries between them and they often overlap.

11. At the top of this hierarchy is the strategic level of conflict. In the broadest sense, strategy involves the employment of a nation's resources - political, economic, moral, scientific, technological, informational and military - to achieve the objectives determined to be in the national interest. Military strategy is a component of national strategy. It provides direction for the use of

² Sometimes referred to more narrowly as the **Levels of War**, however as used here, the term **Levels of Conflict** is equally applicable across the spectrum of conflict.

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military power to achieve national objectives by the application of force or the threat of force.

12. At the operational level, a commander prescribes what military actions are necessary to achieve the strategic aim. He does this by articulating the military intent of the operation, by planning sequential military actions to achieve this intent, and by initiating and sustaining such actions. At this level, commanders design, prepare and conduct joint campaigns and major operations, each of which comprise a series of battles, engagements and other actions.

13. The operational level is not defined by the number and size of forces or the echelon of headquarters involved. In a large scale conflict, a corps may be the lowest level of operational command. However, in smaller scale conflict, operational level activity can take place at much lower levels. If a military force, of whatever size, is being used to achieve a strategic objective, then it is being employed at the operational level.

14. At the tactical level, battles, engagements, and other actions are planned and executed to accomplish military objectives established by the operational level commander. The tactical level should never be viewed in isolation, for tactical success alone does not guarantee strategic success. Battles and engagements generally shape the course of events at the operational level, but they become relevant only in the larger context of the campaign. The campaign, in turn, only gains meaning in the context of strategy. This is illustrated by the dramatic tactical victory at Cannae that nonetheless failed to bring Hannibal success in his campaign to conquer Rome; in the same way US operations in Vietnam achieved consistent tactical successes but they did not lead to strategic victory. A comprehensive view is required to understand that the three levels of conflict are inextricably linked.

15. This delineation into levels of conflict has limitations. Factors such as the advent of information technology are compressing these levels, blurring the distinction between each. The important lesson is not to discern at what level a certain activity takes place or where the transition occurs between levels, but to ensure that from top to bottom and bottom to top all activities are coordinated and focused towards achievement of the strategic objective.

16. An understanding of the complexities of working at the operational level in a joint and combined context is essential for the Canadian army to execute, or even to cooperate in the planning and conduct of, campaigns and major operations. Commanders need to develop an appreciation of the interaction of the levels of conflict to provide timely and astute advice to the

government on the advantages and disadvantages of the use of military force in domestic and international operations.

THE ENDURING CHARACTERISTICS OF CONFLICT

17. Conflict, in all its forms, has the following enduring characteristics : friction, uncertainty, ceaseless change, violence, and the human dimension. Although their influence can be reduced, these factors are always present. **This essential truth cannot be ignored.**

18. An army must recognize these timeless characteristics and attempt to exploit them advantageously or to minimize their negative effects. Soldiers should learn to operate in conditions where friction, uncertainty, change and violence constantly disrupt even seemingly simple tasks. This is achieved by training every soldier to fight with determination and the strength of will to overcome setbacks and take advantage of fleeting opportunities. Self-induced friction can be reduced through an effective command and control system, and by maintaining high morale and cohesion. While thriving in an atmosphere of chaos and friction an army can, simultaneously, attempt to increase the enemy's friction to a level that destroys his ability and his will to fight.

19. Armies can operate in an environment of uncertainty by encouraging the use of simple, flexible plans; by planning for contingencies; by developing standard operating procedures; and by encouraging initiative among subordinates, consistent with the higher commander's intent. This allows forces to exploit the chaos and chance opportunities of battle. As well, an army needs to be able both to withstand the shocks of violence and to manage the application of violence to achieve its objectives.

20. Technological development or scientific calculation will not completely overcome these enduring characteristics of conflict. Any doctrine that attempts to reduce combat to ratios of forces, weapons, and equipment, neglects the impact of human will on the conduct of operations and is therefore inherently false. Conversely, any doctrine that has as its bedrock the belief in the individual soldier's will to fight as the most important component of combat effectiveness will be well served. The army that will succeed is the one best organized, trained and led to resist the violence, friction and uncertainty of conflict and destroy the enemy's resolve.

THE TWO PLANES OF CONFLICT - THE PHYSICAL AND THE MORAL

21. The object of conflict is the imposition of one's will on an opponent. The organized application of violence by physical force is one means to that end. Thus, there are both physical and non-physical aspects of the prosecution of conflict. Seen from this perspective, conflict exists on two planes, the physical and the moral.

22. **The Physical Plane**. On the physical plane conflict is a clash between armed combatants, equipped with an array of armaments and sophisticated military technologies. Each party expends quantities of munitions and other combat supplies, and each is supported by the industrial and economic power of their respective sides.

23. Conflict on the physical plane can generally be easily observed, understood, estimated and measured with a degree of certainty. Of primary concern are the material support requirements for manoeuvre and firepower. It is on this plane that the *science* of conflict predominates, including those activities directly subject to the laws of physics, chemistry and like disciplines.

24. **The Moral Plane**. On the moral plane conflict is a struggle between opposing wills. The term *moral* used here is not restricted to ethics but pertains to those forces of psychological rather than physical nature, including the mental aspects of conflict. These are difficult to grasp and impossible to quantify. They are manifest in such intangibles as the national resolve of adversaries, their military plans and tactics, the quality of leadership and the determination of the individual combatants to achieve victory.

In war, the moral is to the material as three to one.

Napoleon

25. Actions that take place predominantly on the moral plane are more difficult and require the greater investment in combat development and training, however they are more flexible. On this plane the quality of military leadership, the morale of the fighting troops, their cohesion and sense of purpose are of primary importance. Here the *art* of conflict is dominant.

26. Each episode in conflict is a unique product of the dynamic interaction of a multitude of moral and physical forces. Whereas the physical forces may

be quantified with some measure of effectiveness, the intangible aspects of moral forces defy scientific explanation. Therefore conflict remains ultimately an activity of human creativity and intuition powered by the strength of human will. It requires intuition to grasp the essence of unique situations, creativity to devise innovative solutions and the strength of purpose to act. Conflict is above all a moral undertaking. As a result, **moral forces exert a more significant influence on the nature and outcome of conflict than do physical.** This point is fundamental to understanding Canadian army doctrine.

One might say that the physical seems little more than the wooden hilt, while the moral factors are the precious metal, the real weapon, the finely honed blade.

Clausewitz

SECTION 2 CHARACTERISTICS OF CURRENT AND FUTURE CONFLICTS

27. Although conflict has unchanging elements, it is constantly evolving. Doctrine, training, equipment and procedures must change to accommodate the characteristics of current and future conflicts.

28. Since the end of the Cold War, there have been, and will continue to be, deployments to locations and environments that cannot be predicted beforehand. The army requires the adaptability to react to various contingencies and to face previously unforeseen threats. This calls for increased flexibility in doctrine and training because there is no longer the luxury of basing our actions on a known adversary. The Canadian army must be prepared to conduct combat operations in a variety of locations and to deal with varying threats from terrorists up to and including the threatened use of nuclear, biological or chemical weapons of mass destruction. In addition to traditional methods using lethal force, soldiers must be capable of applying non-lethal responses, including information, and interpersonal skills such as negotiation to achieve success on operations. Although this manual is primarily concerned with combat operations, the conduct of operations other than war at the operational level is discussed in Chapter 7.

29. In most cases the army will not operate alone, but will integrate its activities with one or more of the other environments, other countries or with civil agencies. This trend will continue, and cooperation with joint and combined forces, and other agencies will permeate all aspects of operations and

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will take place at lower levels than in the past. As a result, the operational doctrine in this manual is inherently joint and, therefore, consistent with Canadian joint doctrine. The specific aspects of combined operations are outlined in Chapter 6.

30. Technological advances in all areas of science continue to change the face of conflict. The accuracy, lethality and range of modern weapon systems have forced commanders to disperse their formations, and therefore decentralize decision-making and execution. Also, improved surveillance and target acquisition from space and aerial platforms has decreased the freedom to manoeuvre. The speed of decision-making, the synchronization and concentration of force have increased in importance and all depend on accurate information. Meanwhile, technologies such as digitization have increased the ability to share information so that friendly and enemy forces will be more dependant on the electromagnetic spectrum to obtain and transmit information. As a result, our own vulnerabilities must be protected and the enemy's exploited. The instantaneous reporting of military operations by the international and national media has also put new pressures on commanders. These technological changes have resulted in the development of concepts of information or knowledge-based operations. These are discussed in B-GL-300-005/FP-001 Land Force Information Operations.

SECTION 3 PRINCIPLES OF WAR

31. In addition to the elements that describe the nature of conflict, our doctrine is consistent with the Canadian principles of war. The idea of principles of war is not new. For more than two thousand years commanders and military thinkers have set down their thoughts on the conduct of war. These ideas were the distilled essence of what they found essential to the achievement of success. The ideas have taken different forms and have ranged from various philosophical propositions to the formal one hundred and fifteen maxims of Napoleon.

32. This has resulted in most armies developing a set of principles for the conduct of operations, which, derived as they are from experience and practice, should not be regarded as immutable laws. As warfare evolves, so also can these rules or principles be expected to evolve. The Canadian principles of war provide general guidance for the conduct of war but are also applicable to operations other than war. They are the enduring bedrock of Canadian army doctrine. The principles are listed here and explained in detail in B-GL-300-000/FP-000, *Canada's Army*.

33. The mere application of these principles does not guarantee success. Circumstances will dictate the relative importance of each principle. Often, the commander adheres to one at the expense of another. To disregard a principle, however, involves risk and the possibility of failure. The problem for a commander will be to decide which principles will receive emphasis at any given moment. Therefore, the practical value of these principles, as a guide to action, depends very much upon the skill of the individual and his understanding of the nature and theory of conflict.

CANADIAN

PRINCIPLES OF WAR
Selection and Maintenance of the Aim
Maintenance of Morale
Offensive Action
Security
Surprise
Concentration of Force
Economy of Effort
Flexibility
Cooperation
Administration

SUMMARY

34. The essential nature of conflict remains unchanging. It can be seen as a clash of wills, with the object to impose our will upon the enemy. To function effectively the army must be able to operate across the spectrum of conflict. By emphasizing combat operations, it retains the focus on fighting the nation's wars, while also accepting the reality that the army will be involved in a variety of operations other than war, both in Canada and around the world. Canadian

B-GL-300-001/FP-000

Fundamentals

doctrine recognizes three levels of conflict. However, the emphasis in this manual is on the operational level, which is the vital link between military strategy and tactics.

35. The concept that conflict exists on both the physical and moral planes, while emphasizing the decisiveness of the latter, is an essential element of our doctrine. However, doctrine should also be forward looking and adaptable to changing technologies, threats, and missions.

36. Canadian army doctrine is compatible with the nature of conflict and is consistent with the enduring characteristics of conflict and the principles of war. It is intended to be a guide to the application of those principles. The doctrine retains a Canadian character and reflects Canadian realities, but it is also consistent with the doctrine of our closest allies, alongside whom we will conduct combat and non-combat operations.

CHAPTER 2 THE THEORY OF CONFLICT

The aim in war is to overcome the enemy's will to resist and this will be achieved, . . . in one or both of two main ways. The physical destruction of most of or part of his forces by killing is one way to induce in him the feeling of helplessness which begets hopelessness and defeat. Sometimes, however, it will be enough to disrupt his cohesion by placing forces where they can cut his central nervous system - his channels of communication and supply - or where, by the threat of fire, the enemy is persuaded to give up. The aim should be as much to slip a knife between his ribs as to beat out his brains with a club.

CFP 165, Conduct of Land Operations, 1967

SECTION 1 DEFINING SUCCESS IN CONFLICT

1. The object of conflict is to impose our will upon the enemy. Success in achieving that objective is measured against predetermined criteria, generally referred to as the end-state. The end-state is the result that must be achieved at the end of a campaign to conclude the conflict on favourable terms. The end-state will likely have political, diplomatic, economic and psychological, as well as military aspects.

2. The military contribution to success is achieved by using the appropriate amount of force, or threat of force, to compel an opponent to conclude the conflict in accordance with the desired end-state. It may be a resolution to the satisfaction of all parties or termination on one side's terms alone. Rather than a pure military victory, it may often be defined in terms such as reconciliation, acceptance of the status quo, or agreement to a peace plan.

3. Consistent with the Canadian army understanding of the existence of conflict on two planes, the **means** to achieve the desired end-state include physical destruction of the enemy's means of fighting, and attacking his will to resist. This doctrine embraces both of these means.

PHYSICAL DESTRUCTION

4. Physical destruction of the enemy's capacity to fight will be but one of a number of ways to defeat him. Destruction may be pursued to undermine an enemy's ability to conduct operations, but is often most effective when it is used to damage the enemy's morale, and increase his feelings of fear, desperation and hopelessness. Selective physical destruction can be aimed at isolating components of the force or breaking the enemy physically into smaller groups.

5. Physical destruction may not in itself lead to success. This was relearned by the US in Vietnam and is well stated by Liddell Hart :

> There are . . . plenty of negative examples to prove that the conquest of the main armed forces of the enemy is not synonymous with victory. History has no more complete victories than Cannae and Sedan, yet the one failed to bring Hannibal to his goal and the other was only consummated when Paris fell several months after.

6. The comprehensive physical destruction of the enemy may also be difficult and targeting the enemy could cause unnecessary collateral damage. Success criteria that rely on destruction must take into account the risk to public and political support that protracted and inconclusive battles and engagements entail. Physical destruction of the enemy, by itself, is not therefore a wholly reliable means of achieving success.

ATTACKING THE ENEMY'S WILL

7. As defeating an enemy by destruction alone have limitations, our doctrine also encompasses defeating him by striking his moral fibre : his will to resist.

8. To attack the enemy's will to resist, an understanding of the nature of human will is necessary. When an individual faces combat, the primary responses are to fight, flee, or surrender. In most cases, an attack on the enemy's will to fight should be accompanied by measures that encourage the enemy to surrender or flee.

9. This can be accomplished not only through fear generated by violent physical actions such as massive firepower but also by surprising him with

unexpected threats. It can also be achieved by offering fair treatment for prisoners and wounded, showing respect for the law of armed conflict, offering honourable surrender terms or pursuing other methods that legitimize and encourage his surrender. If desirable, flight can be encouraged by offering an open avenue of escape, such as when dispersing a riot.

10. An individual's will to resist is built on internal influences, those of the group, and those of the leader. Internal influences include personal motivation and emotions, such as hatred or revenge, that motivate the individual to continue fighting even if alone. Often more dominant are the influences of the small group. Battlefield studies, notably the work of S.L.A. Marshall, have shown that the primary reason men fight is the feeling of group loyalty or the fear of letting down other members of the group.

11. The individual, and in fact the group, are also affected by the influence of leaders who can provide motivation and compulsion to fight and legitimize the efforts of individuals.

12. It is difficult to alter strongly held personal beliefs, and closely knit small groups are difficult to break up. Therefore, efforts aimed at attacking the enemy's will to fight should focus on two areas. The first is to attack the leaders' will to fight and the second is to disrupt the bonds between larger groups, and shattering the links between leaders and followers. In other words the preferred method of attacking the will to fight is to render the enemy incapable of resisting by shattering the physical and moral cohesion of his force.

COHESION

13. Cohesion is unity. It is the quality that binds together constituent parts of a military organization. With a cohesive force, a commander can maintain unity of effort in imposing his will on the enemy. Cohesion comprises the general identification with a common aim or purpose, the means to concentrate force in a coordinated and timely manner and the maintenance of high morale.

14. Cohesion reflects the unity of effort in the force. It includes the influence of a well articulated commander's intent focussed at a common goal, the motivation and *esprit de corps* of the force and also the physical components necessary to integrate and apply combat power. Cohesion therefore has both moral and physical components.

15. The enemy's cohesion can be attacked by making his overall aim, or the missions of his component parts, increasingly inappropriate or irrelevant; by forcing him to dissipate his forces in both time and space; and by targeting the spiritual, intellectual and material pillars of his morale.

16. Cohesion is an intangible but potent force. A breakdown in cohesion will lead to isolation, fear, confusion, and loss of the will to fight. The enemy will be unable to apply his full combat power and his component parts can be defeated in detail. Ideally, the result is an adversary made up of a collection of individuals and small groups lacking motivation, direction and purpose. This loose collection can be more easily defeated because the ability to fight effectively as a force has been eliminated. Breaking the enemy's cohesion, however, may only be a temporary or transitory effect, and the enemy could regroup and recover if pressure is not maintained. Where physical and moral cohesion is shattered and resistance continues, such as by fanatical individuals or groups, physical destruction may be the only alternative.

SECTION 2 THE CANADIAN ARMY MANOEUVRIST APPROACH TO SUCCESSFUL OPERATIONS

17. Our doctrine is built upon our understanding of the nature of conflict and is consistent with the principles of war. At the same time, Canadian army doctrine acknowledges the existence of moral and physical forces, and the significance of moral factors in conflict. Cohesion is seen as the glue that solidifies individual and group will under the command of leaders. Cohesion allows military forces to endure hardship and retain the physical and moral strength to continue fighting to accomplish their mission.

18. As a result, the Canadian army seeks manoeuvrist approach to defeat the enemy by shattering his moral and physical cohesion, his ability to fight as an effective coordinated whole, rather than by destroying him physically through incremental attrition.³ This manoeuvrist approach strikes a balance between the use of physical destruction and moral coercion, emphasizing the importance of the latter, to attack the enemy's will. This is achieved through a series of rapid, violent, and unexpected actions that create a turbulent and rapidly deteriorating situation with which the enemy cannot cope. Attacks are

³ In the British Army and the US Marine Corps, this approach is referred to as *manoeuvre warfare*.

directed against the enemy's moral components - particularly his willpower, his military plans, his ability to manoeuvre, his command and control ability and his morale. These actions are integrated to seize and maintain the initiative, outpace the enemy, and keep him off balance.

19. The physical application of violence is still critical, but is conducted selectively. Rather than conducting an operation as a toe-to-toe slugging match between two boxers, it should be fought like a bullfight where a stronger opponent can be worn down, confused, and disoriented by the picadors and the elusive and flexible cape of the matador until the latter delivers the final blow with a thrust to the heart.

20. The Canadian army approach to operations is dynamic and multidimensional. It requires a balance between mass, time and space. By speed of action we attempt to pre-empt enemy plans, dislocate enemy forces, disrupt his movement and his means of command and control. Our combat forces are pitted against the enemy's strength only if this is required to hold and neutralize the opponent's forces, or to set up the conditions for decisive action against a critical vulnerability. Normally our combat power is directed against enemy weakness, particularly against his cohesion.

21. Where possible, existing weak points are exploited. Failing that, they must be created. Weak points may be physical, for example, an undefended boundary : they may also be less tangible, such as a vulnerability in passage of information. They are often produced when an enemy is over-extended or suffering the effects of a high tempo of operations. Exploiting weak points requires agility, flexibility and anticipation, and low level freedom of action.

22. Enemy strength is avoided and combat power targeted through his weakness to strike at his critical assets (lines of communications, headquarters, rear areas, reserve forces etc.) directly. The image of water flowing over surfaces and gaps is useful to understand the notion. Water runs off surfaces - enemy strengths - and pours through gaps - enemy weaknesses to follow the path of least resistance. This relates to the concept of gathering intelligence and searching and probing with reconnaissance elements to find gaps to "pull" combat power towards weakness rather than "pushing" based exclusively on centralized direction from the commander.

23. Using this approach, tactical battles are not an end in themselves, but only a building block within the framework of a larger campaign that uses surprise, deception, manoeuvre and firepower to break the enemy's will to fight, primarily through attacking moral and physical cohesion.

The Theory of the Conflict

SECTION 3 ATTACKING COHESION

24. There are three approaches to attacking enemy cohesion. These are, in order of preference : **pre-emption, dislocation and disruption**.

PRE-EMPTION

25. To pre-empt the enemy is to seize an opportunity, often fleeting, before he does, to deny him an advantageous course of action. Pre-emption relies on surprise above all and requires good intelligence and an ability to understand and anticipate the opponent's actions. Its success lies in the speed with which the situation can subsequently be exploited. Pre-emption is used to produce a sufficient and suitably located threat that causes confusion and doubt; destroys confidence by foiling the enemy's plans; and makes his intended course of action irrelevant. Pre-emption denies initiative to the enemy.

26. Whether offensive or defensive, pre-emption demands a keen awareness of time and a willingness to take calculated risks which offer a high payoff. These risks may be reduced with the benefit of intelligence derived from real time sensors that provide a more accurate assessment of the enemy's true situation. Pre-emption can also be achieved by allowing subordinates at all levels the initiative, consistent with the commander's intent, to seize opportunities as they arise.

27. Pre-emption can be achieved, for example, by establishing air superiority or establishing control of the electromagnetic spectrum at the start of operations. On the moral plane, the enemy can be pre-empted by use of a pro-active public affairs programme. This may also include actions to secure the support or neutrality of third parties before the opposition can do so.

DISLOCATION

28. **To dislocate the enemy is to deny him the ability to bring his strength to bear**. Its purpose is much wider than disruption and goes beyond the frustration of the enemy's plans; it is to render the strength of elements of the force irrelevant. It seeks to avoid fighting the enemy on his terms. This is done by avoiding his strengths and neutralizing them so they cannot be used effectively. A dislocating move is usually preceded by actions to distract the enemy and fix his attention. As stated by Liddell-Hart : "It is through 'distraction' of the commander's mind that the distraction of his forces follows.

The loss of freedom of action is the sequel to the loss of his freedom of conception."

HISTORICAL PERSPECTIVE Operation Overlord, 6 June 1944

During the initial stages of the landings in Normandy, the Allies' main fear was a rapid and concentrated German counter-attack before the beachhead was secured. Actions were taken to break the cohesion of the German response by pre-emption, disruption and dislocation.

Pre-emption

Allied troops were parachuted into German rear areas and on the flanks of the landings to seize bridges and other points vital to both sides. This denied mobility to the German troops moving to repel the invaders. At the same time, Ranger and Commando units were employed to seize key emplacements that dominated the landings.

Dislocation

Part of Operation Overlord was the construction of the First United States Army Group (FUSAG) under Gen George S. Patton. This army, an elaborate fake, helped deceive the Germans into believing that the Normandy landings were a feint. The plan used a minimal number of Allied troops to hold German reserves in the Pas de Calais region. This dislocated the main component of the Axis reserves so that their full strength was not brought to bear against the Allied invasion.

Disruption

French resistance forces, carefully coordinated with Operation Overlord, destroyed key portions of the railway net in France. At the same time, Allied air forces bombed other targets on the lines of communications. This disrupted the German transport system, and damaged the ability of the Axis commanders to redeploy their forces to meet the Allied invasion, and to supply their forces in the field.

29. Envelopments or deep penetrations into the operational depth of an enemy, even by small military forces, may cause dislocation of elements of the force by attacking reserves, lines of communications and command and control networks. Deception and operations security can also be used to lure the enemy

into making incorrect deployments, inappropriate use of reserves, and inadequate preparations for operations.

DISRUPTION

30. To disrupt is to attack the enemy selectively to break apart and throw into confusion the assets that are critical to the employment and coherence of his combat power. It is a deliberate act that requires sound intelligence. Its **purpose is to rupture the integrity of the enemy's combat power and to reduce it to less than the total of its constituent parts.** Identifying and locating the most critical assets may not be easy. Key strategic and military targets might include command centres, high-value base facilities, air defence systems, weapons of mass destruction, choke points and critical logistics and industrial facilities. This can be done by getting into his rear areas (normally considered secure), seizing or neutralizing what is important to him, surprising and deceiving him, presenting him with unexpected situations, using psychological operations, and attacking his plans and preparations.

31. To attack moral cohesion, components of the enemy force should be isolated from their command and control. Opposing commanders should be cut off from their sources of information. The lack of information will force bad decisions and cause loss of credibility, motivation, and the will to fight for a "losing" commander. This creates a lack of faith in enemy leaders, so that their effectiveness and competence, as well as the legitimacy of their cause will come into question. This takes away the enemy's sense of purpose and induces fear. The ultimate goal is to produce panic and paralysis by presenting the opponent with sudden unexpected and dangerous change or a series of such changes to which he cannot adjust.

32. Physical cohesion can be attacked by separating commanders from their subordinates by severing, disrupting or jamming communications, attacking lines of communications, destroying elements of the force and interfering with control measures. During World War I, the Canadian Corps became experts in the use of counter-battery fire to disrupt the physical cohesion of the defending Germans. The Canadians were able to separate the defending infantry from artillery support so they could be isolated and defeated more easily.

SECTION 4 THE TWO DYNAMIC FORCES

33. The attack on the enemy's cohesion is executed through a combination of the two dynamic forces of fixing and striking. Implicit in both is the need to find the enemy. Armies pre-empt, dislocate and disrupt by fixing and striking the enemy, both on the physical and moral planes of conflict.

34. In all conflict - whether between two boxers, between two hockey teams, between small groups of guerrillas and soldiers in the jungle, or between large armies in the desert - the *interaction* between them is defined in terms of the two dynamic forces.

The Two Dynamic Forces :

FIXING AND STRIKING

35. Sun Tzu, in the 5th century BC, coined the terms *normal force* to describe the action of fixing the enemy or denying him the freedom to achieve his purpose, and *extraordinary force* for the action of manoeuvring into a position of decisive advantage from which the enemy can be struck.

36. General George S. Patton Jr. has described these dynamic forces even more succinctly :

Hold 'em by the nose . . . and kick 'em in the ass.

FIXING

37. Fixing in physical terms involves the use of combat forces to hold ground against enemy attack, to hold or fix an enemy in one location by firepower and/or manoeuvre, or to hold vital points by protecting against enemy intervention. Its object is to restrict enemy freedom of movement and increase our own ability to manoeuvre.

38. Fixing on the moral plane involves holding the enemy's attention. **The object is to restrict his mental freedom of choice**. Our freedom of action is enhanced by denying the enemy the opportunity to achieve his goals and putting him in a reactive frame of mind. This is done by deceiving, luring, and surprising him. When an enemy is deceived, he is certain how to act - but his
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decision is wrong. When he is lured, he is invited to take a course of action that will make him vulnerable. When he is surprised, he becomes uncertain how to react to ambiguous information until it is too late. True to the enduring characteristic of uncertainty the enemy can be forced to cover all options, thereby dissipating his force and being distracted from his purpose.

39. To fix the enemy, we should deny him information, suppress his ability to pass orders and inhibit their execution. One way that this may be achieved is by domination of all or portions of the electromagnetic spectrum.

40. When the enemy is distracted and held physically (by a strong defence or a supporting attack) or morally (by keeping him in a state of uncertainty) his ability to interfere with friendly operations is reduced.

41. Fixing an enemy may require the use of more direct and lethal means by battle and engagement. Such actions can swallow combat forces quickly. Thus a balance must be struck to ensure that the resources allocated to fixing do not unnecessarily reduce those required for striking.

STRIKING

42. Striking the enemy is achieved by attack on the moral or physical planes, or ideally a combination of both.

In battle there are only the normal and extraordinary forces, but their combinations are limitless; none can comprehend them all. For these two forces are mutually reproductive; their inter-action as endless as that of interlocked rings. Who can determine where one ends and the other begins?

Sun Tzu

43. Striking in physical terms involves the attack on enemy forces to seize or capture ground; destroy equipment, vital points, and installations; kill enemy personnel; or to gain a position of advantage. The object is either to manoeuvre forces or to concentrate and deliver firepower to gain leverage over an opponent.

44. To strike in moral terms is to attack an enemy's cohesion - to attack his morale, his sense of purpose or his decision making ability. **The object is to**

seize the initiative by debilitating him mentally, and eroding his will to fight.

45. Striking at enemy cohesion entails selective *psychological attack* upon his morale, his sense of purpose, and upon his capability to decide, plan and act with any degree of certainty. Electronic warfare, deception, special forces and psychological warfare assets are integrated, when possible, with applied physical combat power. By these means the enemy's decision-action cycle can be disrupted and his command and control abilities destroyed or neutralized. Feint attacks, selective jamming, demonstrations of force, the surgical removal of key elements in his force will create a sense of isolation within an enemy. Striking an enemy on the moral plane by psychological attack requires good intelligence, specialist assets and thorough coordination.

46. Conflict includes the constant interaction of the dynamic forces of combat - fixing and striking - on both the physical and moral planes. They are not effective in isolation and must be coordinated by commanders. Although the means employed may vary, these dynamic forces apply equally to the rifle section as to a multinational joint force. They are useful to both operational level planning and tactical activity.

SECTION 5 COMBAT POWER

47. Armies use combat power to fix and strike the enemy. Combat power is the total means of destructive and/or disruptive force that a military unit/formation can apply against the opponent at a given time. It is generated through the integration of several elements, called combat functions. To produce the desired effect on the enemy, combat power is applied through a combination of fixing and striking to attack moral and physical cohesion.

48. The army defines six combat functions. They are : command; information operations; manoeuvre; firepower; protection; and sustainment. The central importance of command is reflected in Figure 2-1, however all of the functions are clearly interrelated.



Figure 2-1: Combat Functions

49. Commanders seek to integrate these functions and apply them as overwhelming combat power when and where required. The aim is to convert the potential of forces, resources and opportunities into actual capability that is greater than the sum of the parts. Integration and coordination are used to produce violent, synchronized action at the decisive time and place to fix or strike the enemy.

50. Attacking the enemy's cohesion can also be visualized in terms of attacking his efforts to generate cohesive combat power. This can be done by destroying or degrading individual functions, such as command or sustainment, or attacking the links that join them, such as lines of communications or command and control links. In this way the enemy commander can be isolated from receiving information; coordination of manoeuvre and firepower can be disrupted; and the force cannot be sustained. Cohesion can also be attacked by frustrating the integration of the elements of his combat power through foiling his attempts at synchronization, destroying his planned tempo, and making his main effort irrelevant.

COMMAND

51. Command is the exercise of military authority by a designated commander for the planning, directing, coordination and control of military forces. Command is exercised through an arrangement of personnel, equipment, facilities and procedures employed by a commander to accomplish his mission. Control is a supporting means by which command is exercised and regulated, and is normally conducted through a staff.

52. The command function provides the means to unify and integrate the activities of the other functions. Elements of the six combat functions can be combined in an infinite number of ways, just as the artist uses his palette to create any colour that he can imagine. The commander coordinates and focuses forces involved in fixing and striking operations to attack an enemy's cohesion constantly. This is accomplished by applying combat power in well coordinated operations to dislocate, disrupt, and seize opportunities to pre-empt.

53. The central component of the command function is a philosophy emphasizing the importance of formulating and communicating the commander's intent. A thorough understanding of the intent guides decision-making at all levels, encourages both initiative and speed of action. Command is discussed in more detail in B-GL-300-003/FP-000 *Command*.

INFORMATION OPERATIONS

54. Information operations integrate all aspects of information to support and enhance the other combat functions, with the goal of dominating the enemy at the right time, the right place and with the right weapons or resources. These operations take place within four interrelated components of information operations : Intelligence and Information (including ISTAR), Communication and Information Systems (CIS), Command and Control Warfare (C2W), Civil-Military Cooperation (CIMIC), and Public Affairs (PA).

55. **The principal objective in information operations is to gain information dominance** - a relative advantage between the friendly commander's decision-action cycle and that of the adversary, and to use that advantage to enhance and enable the other elements of combat power. They are also used to gain and maintain public support, attack the cohesion and morale of enemy forces and win the support of the indigenous population and government. The concept of information operations goes beyond the simple collection of information, and embraces information as a tool, a shield and a weapon to be used by the commander. Land Force Information Operations are covered in more detail in B-GL-300-005/FP-001.

MANOEUVRE

56. Manoeuvre is the movement of forces, in combination with direct and indirect fire or fire potential, to achieve a position of advantage with respect to enemy forces. It is the means of concentrating land, sea and air forces at the decisive point to pre-empt, dislocate or disrupt the enemy's cohesion through surprise, psychological shock, physical momentum, and moral dominance. While mainly physical it can also have moral effects such as uncertainty, confusion, and paralysis. It involves trade-offs : speed against security, breadth against depth, concentration against dispersion. Asymmetry and a degree of risk-taking are implicit.

57. The freedom of manoeuvre of friendly forces encompasses mobility. Mobility tasks include overcoming natural and man-made obstacles, improving existing lines of communication and other routes or building new ones, and identifying routes around or through areas contaminated by NBC agents, mines or unexploded ordnance.

58. As the commander develops his concept of operations and considers the manoeuvre of all his forces, he is careful to retain a balance in the application of manoeuvre, firepower and protection. The nature of this balance establishes the priorities and relationships of manoeuvre to the other combat functions as the commander translates the *art* of his vision of operations to the *science* of detailed planning and application of combat power.

59. While manoeuvre and firepower are complementary, firepower can rarely substitute adequately for manoeuvre. For example, ground manoeuvre used to secure a position has an enduring effect, which compels the enemy to respond to our actions.

FIREPOWER

60. Firepower, integrated with manoeuvre or independent of it, is used to destroy, neutralize and suppress the enemy. Firepower should be viewed as a joint concept. It encompasses the collective and coordinated use of target acquisition data from all sources, direct and indirect fire weapons, armed aircraft of all types, and other lethal and nonlethal means against air, ground, and sea

targets. The delivery systems include artillery, mortar, and other non-line-ofsight fires, naval gunfire, close air support, counter air, air interdiction and electronic attack.

61. Firepower can be used for both fixing and striking. Its utility demands coordination with other battlefield activities to achieve the greatest combined effect upon the enemy. The sudden lethal effect of firepower can cause localized disruption and dislocation, which can then be exploited by manoeuvre. Firepower is also coordinated with information operations to ensure that electronic and psychological attack reinforces the physical and moral effects of firepower and manoeuvre. Using a combination of weapon systems to complicate the opponent's response is always desirable. The use of firepower, and the threat of its use, can have a tremendous effect upon enemy morale. The effects, however, are always temporary and should be exploited immediately. Firepower is covered in more details in B-GL-300-007/FP-001 *Land Force Firepower*.

PROTECTION

62. Protection encompasses those measures the force takes to remain viable and functional by protecting itself from the effects of enemy weapon systems and natural occurrences. Protection can be enhanced by active measures employing firepower, manoeuvre, air defence and counter-mobility measures to fix the enemy and if necessary destroy him before he can attack effectively. Passive measures include hardening of facilities and fortification of battle positions, protection of civilians and civilian infrastructure, NBC defence measures as well as camouflage, concealment and non-electronic deception. It also includes actions to reduce fratricide.

63. Protection is also enhanced through efforts to limit non-combat losses by providing basic health needs and welfare facilities to preserve cohesion and morale as part of sustainment. The overall protection of the force is coordinated with application of defensive command and control warfare (OPSEC, deception, EW, and PSYOP), as part of information operations. Air defence is another key aspect of protecting freedom of action and it encompasses maritime, land and air capabilities. It prevents the enemy from using a primary means, air power, to break our cohesion.

64. Denying mobility to enemy forces aims to disrupt, turn, block or fix enemy offensive movement, thereby breaking the physical cohesion of his forces and enhancing the combined effects of fire and manoeuvre. Counter

mobility includes obstacle creation and obscuration B-GL-300-006-/FP-001 *Land Force Protection*.

SUSTAINMENT

65. Sustainment is achieved through a balance of military administration and civilian support through host nation support, other government departments, and agencies and civilian contractors. Military administration includes, primarily, personnel administration and logistics. Sustainment provides the physical means with which forces operate but also contributes to moral cohesion through effective medical services, flexible personnel administration and morale programmes. Sustainment is covered in greater detail in B-GL-300-004/FP-001 *Land Force Sustainment*.

SECTION 6 INTEGRATION OF COMBAT FUNCTIONS

66. The multiple combinations of the combat functions are designed by the commander to produce maximum combat power. They are integrated in time and space through the designation of the main effort, and the use of synchronization and tempo.

MAIN EFFORT

67. Designation of a main effort is a clear and simple method of enabling the commander to direct the desired weight of his combat power to one purpose. The main effort is the activity that the commander considers crucial to the success of his mission at that time. By focussing his efforts to strike hard at one of the enemy's weak points, it can overthrow an opponent who may be, in total strength, more powerful.

68. The statement of main effort allows a subordinate commander to focus his actions on the commander's aim, while giving him flexibility in achieving it. It is not a point on a map. The main effort is the activity the commander wants to use to achieve a decision. It should be qualified by location, time and the force(s) directly involved. For ease of comprehension, the designated force is referred to as being "on the main effort." Designation of the main effort helps to ensure that in the absence of detailed orders commanders can still act decisively within the framework of the higher commander's intent, while clearly understanding the priority of effort.

69. There may be a different main effort for different phases of an operation. Initially, for example, the main effort may be fixing the enemy as part of a deep operation, using part of the force. It may then switch to striking the enemy in a close operation, involving the main body. Similarly, although the main effort for other support forces must always reinforce the main effort of the unit or formation they are supporting, they will not necessarily coincide with it. For example, the main effort for sustainment forces may be the establishment of forward bases to support a subsequent exploitation of tactical success by forces currently out of contact.

70. The commander can reinforce his main effort through narrowing the area of operations, grouping extra combat power on the main effort, allocation of priority for firepower, sustainment, mobility or information operations support and planning options for reserve forces to support the main effort. Once defined at one level, main efforts should be designated at every subordinate level.

SYNCHRONIZATION

71. Synchronization is the arrangement of military actions in time, space and purpose to produce maximum combat power at a decisive place and time. Synchronization is used to overload the enemy commander. He is attacked or threatened from so many angles at once that he is denied the ability to concentrate on one problem at a time or to establish priorities. Facing menacing dilemmas about how and where to react, he is torn in different directions. Even if not totally paralysed, he finds it hard to respond coherently and in a timely manner.

72. If the effect is repeated simultaneously against enough levels of command, a cumulative effect on cohesion is felt throughout the enemy force. His problems are compounded so that the response to one form of attack makes him vulnerable to others or it exacerbates a different problem. In this way the commander can, in the words of the US Civil War General William T. Sherman, "*put the enemy on the horns of a dilemma*."

73. For example, the enemy may have his use of the electromagnetic spectrum curtailed and he may be attacked simultaneously using firepower from artillery and from the air at ranges he is unable to match. When this is synchronized with manoeuvre of friendly forces, the enemy can be forced into a position from which he can neither fight effectively nor escape. Synchronization is not useful for its own sake, but should be seen through the

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eyes of the enemy and judged by its effect on his actions. Over control to achieve synchronization can stifle initiative and interfere with the desired tempo of operations.

TEMPO

74. Tempo is the rhythm or rate of activity on operations, relative to the enemy. Tempo consists of three elements : speed of decision, speed of execution, and the speed of transition from one activity to another. It relates to the temporal integration of the combat functions to maximize combat power. Within tempo the ability to reconstitute quickly is paramount. Forces should, therefore, be organized to achieve high tempo operations, when necessary, by grouping at each level of command for independent action to the greatest extent possible.

75. Tempo seeks to keep the enemy off balance by posing new and different threats, so that the situation the enemy believes he is facing is repeatedly changed so that his responses are inappropriate. **This can be done by speeding up or by slowing down, or changing the type of activity.** It can also be achieved not only by attacking the enemy, but by attacking his plan and his decision-action cycle.

HISTORICAL PERSPECTIVE

During the "Hundred Days" campaign of WW 1, the Canadian Corps found that after the first day of a successful attack, the infantry outran the artillery support; communications could not be maintained and tank support faded resulting in erosion of physical cohesion. The lack of artillery support led to high casualties against the deep German defence as the attack slowly ground to a halt. In response to this, commanders decided to slow the tempo of the attack by inserting a pre-planned 4-6 hour delay to bring up artillery and tanks, reestablish communications and conduct resupply and battle procedure. In this way the Canadians, and not the enemy, dictated the tempo of operations and were therefore able to preserve the cohesion of the attack and retain the initiative.

76. In all forms of conflict each party assesses the situation, decides and acts, then reassesses to see what effect his actions have had. This is called the

decision-action cycle.⁴ He who consistently completes the cycle faster gains an advantage that increases with each repetition. The enemy's actions become less and less appropriate to the real situation until he loses the cohesion needed to continue to fight. The enemy should be made to see that his situation is not only deteriorating but doing so at an ever increasing and unstoppable rate. The ultimate goal is panic and paralysis - resulting in erosion of the enemy's will to resist.

77. Decentralization of decision-making authority consistent with the commander's intent can also be used to increase tempo. This allows decisions to be made quickly and at the lowest practical level. If observations need to be passed up the chain of command before a decision is made, and the orders transmitted back down the chain, the decision-action cycle is going to be slow.

78. Clear, simple and short orders that clearly state the mission, the commander's intent and the main effort can also help increase tempo. Well-known and understood doctrine and practised standard operating procedures will greatly assist in the transmission, understanding and implementation of orders. However, they should not be used to restrict initiative, but as multipurpose tools that can be adapted to changing circumstances.

79. Tempo can be increased by avoiding battle unless absolutely necessary, consistent with the commander's intent. Preparation, conduct and recovery from battle all consume valuable time and disrupt the tempo of friendly forces. The aim should be to give battle only when success contributes directly to the operational end-state.

The soundest strategy in any campaign is to postpone battle, and the soundest tactics to postpone attack, until the moral dislocation of the enemy renders the delivery of a decisive blow practicable.

Basil Liddell-Hart

80. Above all, to operate at a quicker tempo than the enemy, the friction, chaos and uncertainty of the battlefield must be accepted. Fluidity of operations should be embraced as the norm.

⁴ Sometimes referred to as the observe-orient-decide-act (OODA) loop or Boyd cycle after USAF Colonel John Boyd. See also Chapter 3.

The Theory of the Conflict

81. To avoid having the enemy cut inside the commander's decision-action cycle, patterns and formulas are to be avoided. The enemy should not be able to predict friendly actions and adapt his responses accordingly. New, imaginative, quick and unexpected solutions are always required.

SECTION 7 SUMMARY

82. The success of operations is measured against the criteria defined in the campaign end-state and is accomplished by the imposition of our will on an opponent. This is achieved by the application of **combat power** through a combination of physical destruction of the enemy's means to fight and attacks on his will to fight.

83. Combat power is *applied* using the dynamic forces of combat, fixing and striking, to achieve decisive effects on enemy cohesion. Combat power is *generated* through the combination and integration of the combat functions. They are integrated in time and space through designating a main effort and utilizing synchronization and tempo.

84. Canadian army doctrine seeks to achieve success by attacking the enemy's will by targeting moral and physical cohesion rather than the detailed destruction of his combat power. This method strikes a balance between use of physical destruction and attacking the enemy's will, emphasizing the importance of the latter.

85. The approach outlined in this manual demands imaginative and creative thinking to present the enemy with innovative and novel problems at a tempo with which he cannot cope. Formulas and checklists are to be rejected.

PARTIE II CAMPAIGNING

Campaigning reflects the operational level of war, at which the results of individual tactical actions are combined to fulfil the needs of strategy. A campaign is a series of related military actions undertaken over a period of time to achieve a strategic objective within a given theatre. A campaign usually involves coordination of land, sea and air forces and, as a result, will almost always be joint.

The methods outlined for the design and execution of operations in Part II employ the doctrine outlined in Part I, and are applicable for operations throughout the spectrum of conflict. They advocate success by attacking and destroying an enemy's moral and physical cohesion, rather than by destroying him physically through incremental attrition. They attempt to illustrate how decisive military success may be achieved by moral coercion and selective destruction.

The campaigning methodology described below accommodates the enduring and contemporary characteristics of conflict, and also puts into perspective such issues as how information age technology will impact on military operations. This discussion is primarily conceptual and descriptive. Prescriptive procedures are defined in the B-GG-005-004/AF-000 *Canadian Force Operation*.

Part II is divided into three chapters. The first deals with campaign design. This is the operational commander's overall scheme for accomplishing the assigned goals, and is the foundation for all subsequent campaign planning and preparation. It is here that the commander must display an ability in **operational art**. The second chapter describes the campaign plan itself. This is the statement of the commander's design for prosecuting the operation. It provides the guidance and direction to subordinates executing tactical missions and for staff planning. The third chapter discusses the conduct of the campaign, focussing on the operational commander's responsibilities. Annexes to this chapter examine historical campaigns in greater detail to illustrate the concepts in the preceding chapters.

CHAPTER 3 CAMPAIGN DESIGN

In war as in art there is no general rule, in both talent cannot be replaced by a precept.

Field Marshal Von Moltke

SECTION 1 OPERATIONAL LEVEL PLANNING

1. The Canadian Forces has developed an operational level planning architecture within which, in peacetime and crisis, the nation's policies are translated - using the Canadian Forces Operational Planning Process⁵) (CFOPP), Contingency Operation Plans, Operation Plans and Supporting Plans. This planning structure provides for the issue of operational directives and operation orders to subordinate commanders.

2. The purpose of this and the subsequent chapter is to describe a process that will enable an operational level commander to formulate a campaign plan. The campaign planning process, using concepts of campaign design and the CFOPP as tools, comprises all of the actions of the commander and his staff from the receipt of strategic direction, through an estimate to the finalized plan. Subsequent cycles of the CFOPP will create more detailed orders for each phase of the campaign. This planning would of course be made easier if contingency plans already existed for the specific scenario and area of operations. A well-considered campaign plan is essential for success at the operational level of war, since it provides the overall unity of purpose for all activities in the theatre.

SECTION 2 OPERATIONAL ART

3. Operational art is the skill of translating strategic direction into operational and tactical action. It is that vital link between the setting of military strategic objectives and the tactical employment of forces on the battlefield through the skilful execution of command at the operational level. Operational

⁵ This manual should be read in conjunction with B-GG-005-005/AF-004, *Force Employment*, which outlines the detailed planning process for joint campaigns.

art involves the design, planning, and conduct of campaigns and major operations. It requires a clear understanding of the consequences of operational level decisions, their tactical results, and their impact on strategic aims.

4. No specific level of command is solely concerned with operational art. In its simplest expression, operational art determines when, where, and for what purpose major forces will fight. It governs the deployment of those forces, their commitments to or withdrawal from battle, and the sequencing of successive operations to attain operational objectives.

5. The skilful employment of operational art requires commanders with broad vision, the ability to anticipate, and a careful understanding of the relationship of means to ends. Using operational art, the commander applies intellect to the situation in order to establish and transmit a vision for the accomplishment of the strategic objective.

SECTION 3 STRATEGIC DIRECTION

6. Government policy creates and directs the nation's response to conflict. The activity that strives to attain the objectives of policy, in peace as in conflict, is strategy. At the highest level there is national strategy. This involves the application and coordination of all elements of national power : economic, diplomatic, psychological, informational, technological, and military. Subordinate to this is military strategy, which in essence, is the applied or threatened use of military force to impose policy. Military strategy, being a subset of national strategy, must be coordinated with the use of other elements of national power.

7. Military strategy is the province of national policy makers, their military advisers, and the nation's senior military leadership. Their first concerns are defining the national strategic conditions that determine success, translating policy goals into military terms by establishing military strategic objectives, assigning operational level command, imposing limitations, and allocating resources. These should be clearly encapsulated in a **strategic directive**, which initiates the operational commander's decision-action cycle.

SECTION 4 CAMPAIGN DESIGN

8. Regardless of the clarity and comprehensiveness of the strategic directive, the operational commander must formulate his own vision for the

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Campaign Design

conduct of the campaign. This conceptual vision is the essence of his campaign design. It also serves as the basis for subsequent development, with the staff, of the campaign plan, orders and directives.

9. After the commander receives the strategic directive, his principal task is to determine and pursue the sequence of military actions that will most directly serve the strategic objective. The **mission analysis** of the strategic direction as part of a rigorous estimate process is a vital part of this process.

10. Generally, campaigns have a single strategic objective. If there is more than one strategic objective, campaigns are waged sequentially or simultaneously. In this way, smaller campaigns may exist within larger ones. Regardless, **the focus on the military strategic objective is the single overriding element of campaign design.**

MISSION ANALYSIS

11. Mission analysis is a logical process for extracting and deducing, from a superior's order, the tasks necessary to fulfil a mission. At the operational level, it places in context what effect is to be achieved by the campaign.

12. The operational commander must analyse and discuss the strategic directive with senior military or government leaders to ensure that the policy goals are clear and that the national level authorities are made fully aware of the consequences of committing military forces to a campaign. When strategic aims and conditions appear unreasonable, the commander must so state. When they are unclear, he must seek clarification. While required to pursue the established aim, he is obliged to communicate the associated risks to his superiors. He must also state if the resources are insufficient and what he perceives will be the consequences of any imposed limitations on the achievement of the strategic aim. When limitations imposed by the strategic authority are so severe as to prevent the attainment of the established aim, the commander must request relaxation of either the aim or the limitations.

13. Military planning in a crisis will be an iterative process with political and diplomatic activity occurring in parallel. Even in purely national operations, the ideal contents of a strategic directive are unlikely to be available at an early stage. In some cases it must be acknowledged that contingency planning and some preparations may begin without a politically approved mission, but formal military planning should not begin without a clear mission. If a clearly

enunciated strategic directive is difficult to obtain, the operational commander should prepare options for approval.

14. The mission analysis should consider what other instruments of national power, particularly diplomatic, legal, and economic that will be used to support the commander to achieve the overall objective. He must consider the military end-state and the operational objectives required to achieve it. The mobility and sustainment of the force must also be considered.

15. The operational commander's mission analysis will allow him to provide planning guidance to his staff. It should clearly state the tasks to be accomplished and the framework within which the estimate is to be conducted.⁶

16. Flexibility and adaptability in campaign design and planning are essential because each new crisis and each development during a crisis brings unforeseen complexities for which there may be no preplanned solutions. As costs, capabilities and expectations are re-evaluated during the campaign, the strategic aims, or the criteria for success, may require mission analysis to be conducted again. Thus, military options will evolve and may be limited by complicated command and control arrangements, restrictive rules of engagement and hedged with political limitations.

17. The optimum use of force from the military perspective may not be feasible from the political or diplomatic perspective. Force levels may be determined by the political situation, the national will to commit forces, public perception and its influences on government leaders and other competing strategic priorities.

18. Commanders and staffs must anticipate crises, plan for them and act in parallel with political, diplomatic, and relevant non-governmental activity. This will ensure that, if the use of force is necessary, it will be as effective as possible. This does not, however, absolve the strategic authority of the absolute requirement to provide clear and practical guidance to operational level commanders. Without this guidance, the military effort will be unfocussed, wasteful and, most likely, ultimately unsuccessful.

⁶ The estimate process at the operational level is described in detail in B-GG-005-000/AF-004 *Force Employment*, Chapter 4.

MILITARY END-STATE

19. Commanders at all levels must have a common understanding, prior to hostilities, of the criteria or conditions that constitute military success. This situation is referred to as the **military end-state**. A military end-state includes the required conditions that, when achieved, attain the strategic objectives or allow other instruments of national power to achieve the final strategic end-state. The military end-state is that state of military affairs that needs to be achieved at the end of the campaign to either terminate, or help resolve, the conflict as defined by the strategic aim.

20. Determining the military end-state, and ensuring that it accomplishes the strategic objectives, are the *critical first steps* in the conceptual design of the campaign. Failure to make this determination will waste scarce resources and put the entire effort at risk.

21. The end-state consists of those necessary conditions that by their existence will achieve the established objective. These conditions will vary between moral coercion by the threat of military violence and complete physical destruction of the enemy's means to fight. Generally, in war, where military factors are predominant, policy goals are translated into military terms entailing the defeat of enemy forces or occupation of terrain. For instance, the unconditional surrender of the enemy as a policy objective implies the outright defeat of his military forces. General D.D. Eisenhower received such an objective in 1943 :

"You will enter the continent of Europe and in conjunction with other Allied Nations, undertake operations aimed at the heart of Germany and the destruction of her armed forces."

SECTION 5 OPERATIONAL OBJECTIVES

22. Once the military end-state is clearly defined, the commander must identify the **operational objectives** of the campaign. These are the military goals that need to be achieved in the campaign to produce the desired end-state. They may include the enemy's command, control and communications system, his logistic installations and elements, or those aspects that are vital to the morale of his troops or his public support. Operational objectives may also include elements of the enemy's forces whose neutralization or destruction will

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have a decisive effect. These operational objectives, taken in combination, will achieve the conditions necessary to achieve the desired end-state.

23. Selecting the operational objectives is made easier with an understanding of the concepts of **centre of gravity**, **decisive points**, and **lines of operations** and how they apply to fighting the campaign.

CENTRE OF GRAVITY

24. The centre of gravity is that aspect of the enemy's total capability that, if attacked and eliminated or neutralized, will lead either to his inevitable defeat or his wish to sue for peace through negotiations. It has also been described as that characteristic, capability, or location from which enemy and friendly forces derive their freedom of action, physical strength, or will to fight. The identification of the enemy's centre of gravity, and the single-minded focus on the sequence of actions necessary to expose and neutralize it are the essence of operational art.

25. At the strategic level the centre of gravity may often be abstract, such as the enemy's public opinion or perhaps his strength of national purpose. Thus, the strategic centre of gravity may be discernable but not accessible to military attack. In such cases an operational level centre of gravity must be selected which could contribute to the elimination of the strategic centre of gravity. Therefore, there is an obvious interrelationship between the strategic centre of gravity, the operational objectives and the operational centre of gravity.

26. The centre of gravity may be moral or physical. If the centre of gravity at the strategic level is identified as a state capital or vital installation, or at the operational level as a military formation, then the military targets are clear. However, if the centre of gravity is moral, such as the public will (strategic level) or the cohesion of a multinational coalition (operational level), the problem of its elimination or neutralization is more complex.

27. While we are attempting to find and attack the enemy centre of gravity, he will be trying to do the same to us. The friendly force centre of gravity must be determined as part of the campaign design. The campaign is then conducted by attempting to destroy or neutralize the opposing force's centre of gravity while continuously protecting the friendly force centre of gravity from opposing force actions.

HISTORICAL PERSPECTIVE

Centre of Gravity : Québec, 1758-1760

As part of the actions fought in the British and French colonies of North America during the Seven years war, the British in 1758 captured Louisbourg at the mouth of the St. Lawrence, as well as the French posts at Fort Duquesne, in the Ohio Valley, and Fort Niagara. The loss of Louisbourg and the western forts interfered with French trade, but the key to the "Nouvelle France" interior was the capital, Québec City. The British could not gain control of New France without taking Québec.

Not only was it the capital, but the heights of Québec's upper town dominated the place where the St. Lawrence River narrows. Sailing upstream, the town is the first place where a shore battery or a single ship can cover the entire channel of the river. All traffic into the interior of New France from the Atlantic had to pass under the guns of Québec.

After an innovative indirect approach by the British, and a fiercely fought battle on the Plains of Abraham on 12 September, 1759, the French army retreated into the country. The town garrison, out of food, surrendered, and the British held Québec City. The following year, a spirited attempt by the French land forces to retake the capital failed for lack of supplies, and British troops, supplied by sea through Québec, slowly constricted the French army and starved it into surrender.

The British did not destroy the French army in 1759. New France was not taken by reducing her outlying forts. The land warfare in North America largely ended after the fall of the capital. Therefore, the city of Québec may be described as the centre of gravity of the three campaign seasons of 1758-1760.

DECISIVE POINTS

28. It may not always be possible nor desirable to attack an opponent's centre of gravity directly. Indeed, since a judicious enemy commander will strive to protect his centre of gravity, logic suggests that an indirect approach that applies pressure to vulnerable points on which that centre of gravity depends will offer the best prospects of success. A vulnerability may have to be created to get at the centre of gravity or to strike it indirectly in an unexpected manner. Consequently, a series of **decisive points** leading from the

commander's base of operations to the opposing force's centre of gravity will need to be identified.

29. **Decisive points are those events, the successful outcome of which are preconditions to the defeat or neutralization of the enemy's centre of gravity.** They are the keys to unlocking his centre of gravity. The term decisive point may also be used to describe an event required to protect one's own centre of gravity. They may be moral or physical events. An event need not be a battle. It may be the elimination of a capability (such as the destruction of early warning radar systems or the domination of the electromagnetic spectrum), and may or may not have geographical relevance. The key consideration is the effect on the enemy.

LINES OF OPERATION

30. Lines of operation describe how military force is applied in time and space through decisive points on the path to the centre of gravity. They are not synonymous with physical axes of advance. Lines of operation establish the relationship between decisive points, produce a critical path to the centre of gravity, and ensure that events are tackled in a logical progression.

31. Lines of operation are established to flow through the defined decisive points towards the enemy centre of gravity. The approach to the centre of gravity may be direct or indirect. The best approach may be using multiple lines, attaining a multidimensional effort where several attacks converge upon and defeat the enemy centre of gravity. The synchronization of multiple lines of operations can overload the enemy commander by presenting him with several threats at the same time.

32. Where the decisive points are physical, a line of operation can be defined in physical terms; manoeuvring a force from its base of operations to operational objectives. Where decisive points are moral and intangible, the linkages between them will be harder to define. Moral decisive points can be achieved through the exploitation of electro-magnetic spectrum, through special operations, deception or through psychological operations. Properly sequencing these activities through lines of operations is critical.

Campaign Design

SECTION 6 SEQUENCING

33. Operational objectives are not generally attainable through a single action, so the operational commander would normally design his campaign to comprise a number of related phases. He must therefore have a clear understanding of the relationship between events in terms of time, space, resources and purpose. Without this he cannot establish which events can be done simultaneously, which have to be done sequentially, and in what order.

34. Sequencing is the arrangement of events within a campaign in the order most likely to achieve the elimination of the enemy's centre of gravity. It can also be thought of as the staging of decisive points along lines of operation leading to the enemy centre of gravity.

HISTORICAL PERSPECTIVE

The original campaign plan for DESERT STORM illustrates a clear sequence of operations aimed at the elimination of the Iraqi centre of gravity. The campaign began with an air operation which targeted in sequence, enemy early warning systems, enemy air defence, enemy air power and command and control systems. It progressed to an air operation targeting enemy logistic and communications assets, followed by air, naval gunfire and artillery attacks against ground forces. Finally, once certain decisive points had been achieved, the ground operation commenced against the operational centre of gravity - the Republican Guard.

35. Skill at sequencing allows commanders to determine the correct relationship between time, space and forces available to achieve a higher purpose. This skill will also help to determine what instructions the operational commander must give his subordinates, who must understand the impact of their tactical missions on the campaign. This ability to design campaigns is essential to operational art.

SECTION 7 OPERATIONAL ART AND THE COMMANDER

36. The degree of success with which a commander can apply operational art will depend on his experience, education, leadership, intellect, judgement, flexibility, courage, strength of will and determination.

37. In addition to his personal abilities, the commander must also understand, and thrive in, the external environment within which he must operate. In the complex conditions of contemporary conflict, commanders are increasingly likely to contend with a wide range of external factors, including political and legal constraints, considerations of joint and combined operations, and media interest over which he will have little or no influence.

38. The commander's success in this environment must be built upon a foundation of experience and professional knowledge. This is gained through operational command, training and self-study. It cannot be obtained simply or cheaply and must be built up carefully and sustained through constant effort. It also includes the ability to fuze the input of the staff with his own ideas. The commander must demonstrate originality and creativity, always being prepared to employ cunning, shrewdness, and deception. He should be willing to use, in the words of Churchill, "an original and sinister touch, which leaves the enemy puzzled as well as beaten."

COMMANDER'S VISION

39. Once the commander has conducted his mission analysis of the strategic direction and considered the end-state and enemy centre of gravity, he must formulate the vision of how the campaign will be conducted. The commander must possess the creativity and intuition to accurately visualize the future state through a series of "snapshots," a sequence of activities and events over time that lead to the desired end-state. This ability to instantly perceive the essence of how to proceed is sometimes referred to as *coup d'oeil*. The commander's vision will provide the focus for coordinated tactical actions, extended over time and space, towards a common goal.

Coup d'oeil [is] the quick recognition of a truth that the mind would ordinarily miss or would perceive only after long study.

Clausewitz, On War

Success in war depends on coup d'oeil, and on sensing the psychological moment of battle. At Austerlitz, had I attacked six hours earlier, I should have been lost.

Napoleon I quoted in J.F.C. Fuller, *The Conduct of War*

In ...battles, theory becomes an uncertain guide; for it is then unequal to the emergency, and can never compare in value with a natural talent for war, nor be a sufficient substitute for the intuitive coup d'oeil imparted by experience in battles to a general of tried bravery and coolness.

Jomini, Summary of the Art of War

The clever general perceives the advantages of the terrain instantly; he gains advantage from the slightest hillock, from a tiny marsh; he advances or withdraws a wing to gain superiority; he strengthens either his right or hhis left, moves ahead or to the rear, and profits from the merst bagatelles. . . Whoever has the best coup d'oeil will perceive at first glance the weak spot of the enemy and attack him there.

Frederick the Great, Instructions for His Generals

40. As conflict is a contest of wills, the vision is an expression of the commander's will, and the method of imposing it on t he enemy. No coherent operations plan can be written without a clear and consistent vision of how the operation should be concluded.

COMMANDER'S INTENT

41. This vision is communicated by the statement of the **commander's intent**. Consistent with the command philosophy, the commander's intent provides subordinates with the freedom to adapt their actions to achieve success. The intent should be expressed in a few simple sentences that clearly state why an operation is being conducted, the desired end-state, and how the force as a whole will achieve that end-state. By focusing on the end-state rather than

sequential events, it allows subordinate forces, and hence the whole force, to operate faster, with increased speed and efficiency in decision-making and with greater agility, than the adversary. The intent statement is written by the commander himself and should reflect his personality and leadership style. Therefore he should not be afraid to be inspirational or emotional because the commander's intent must provide motivation as well as direction.

42. While the specific tasks assigned to subordinates may become obsolete through changed circumstances, the commander's intent remains valid. A clear, well-expressed intent allows for continued unity of command in spite of the friction, chaos and uncertainty of conflict. The commander's vision is communicated through his intent and eventually through plans and orders prepared by the staff.

43. Communicating the intent clearly and powerfully through numerous layers of command, each of which exerts a certain friction on effective communication is as vital as the formulation of the intent itself. However brilliant a commander's powers of leadership and decision making, they are of no use if he cannot communicate his intent clearly so that others can act. The intent may be transmitted personally, by addressing large audiences, visiting subordinates and units, issuing orders and directives or a combination of these methods. As Field Marshal Slim said, the operational commander must possess "the power to make his intentions clear right through the force." "The will of Frederick and Napoleon," Hans von Seekt wrote, "was a living force in the humblest grenadier."

THE COMMANDER'S DECISION

44. The commander selects, from the courses of action open to him, the one which he considers the most likely to achieve the strategic objective and expresses it in his decision.

HISTORICAL PERSPECTIVE

The concepts of visualization, commander's intent and end-state can be understood by examining the events of the invasion of France in May 1940 from the viewpoint of one of the senior commandrs, General Heinz Guderian. In March 1940, two months before the invasion of France General Guderian described his vision of the campaign :

"Each of us generals outlined what his task was and how he intended to carry it out. I was the last to speak. My task was as follows : on the day

ordered I would cross the Luxembourg frontier, drive through Southern Belgium towards Sedan, cross the Meuse and establish a bridgehead on the far side so that the infantry corps following behind could get across. I explained briefly that my corps would advance through Luxembourg and Southern Belgium in three columns; I reckoned on reaching the Belgian frontier posts on the first day and I hoped to break through them on that same day; on the second day I would advance as far as Neufchâteau; on the third day I would reach Bouillon and cross the Semois; on the fourth day I would arrive at the Meuse; on the fifth day I would cross it. By the evening of the fifth I hoped to have established a bridgehead on the far bank. Hitler asked : 'And then what are you going to do?' He was the first person who had thought to ask me this vital question. I replied 'Unless I receive orders to the contrary, I intend on the next day to continue my advance westwards. The supreme leadership must decide whether my objective is to be Amiens or Paris. In my opinion the correct course is to drive past Amiens to the English Channel....' I never received any further orders as to what I was to do once the bridgehead over the Meuse was captured. All my decisions, until I reached the Atlantic seaboard at Abbéville, were taken by me and me alone.

"Guderian's view of the campaign's end-state and his own intent are clear from his thoughts immediately before the operation started:

"The 1st Panzer Division was commanded by General Kirchner, the 2nd by General Veiel, and the 10th by General Schaal. I knew all three of them well. I had complete trust in their competence and reliability. They knew my views and shared my belief that once armored formations are out on the loose they must be given the green light to the very end of the road. In our case this was - the Channel! That was a clear inspiration to every one of our soldiers, and he could follow it even though he might receive no orders for long periods of time once the attack was launched."

45. In making his decision, the commander must balance the abstract concepts of campaign design, leadership, vision, and intuition associated with operational art with the more concrete, mechanical, and analytical staff procedures such as the production of estimates, staff checks, directives and orders. He must determine what aspects should be developed by the staff and which ones he will complete himself. Although quite different in concept, the two aspects, art and procedure, are complementary and their influence must be given due consideration in the commander's decision.

46. The decision is reflected and promulgated in the commander's concept of operations and eventually, except for the simplest of operations, a campaign plan. The development of the campaign plan is covered in detail in Chapter 4.

THE CONCEPT OF OPERATIONS

47. The commander's concept of operations expresses his intentions on the use of forces, time and space to achieve his objectives, and how the available resources are to be utilized. The concept should also include the desired end-state which should exist when the operation is terminated. The operational commander may be required to submit his concept of operations to the strategic authority for approval.

48. Once the commander has determined the overall concept and intent of the campaign, and a tentative sequence of operations, he must provide sufficient guidance for staff and subordinates to focus the detailed planning through the campaign plan.

SECTION 8 SUMMARY

49. The link between strategic direction and tactical action is described as operational art. Operational art requires commanders with the ability to visualize the end-state and to communicate his intent clearly throughout the span of command.

50. Campaign design is the process that the commander uses to assist him to visualize the campaign. Campaign design starts in earnest once a strategic directive is received and the policy goals are made clear. Campaigning then becomes an operational level concern. The operational commander must conduct mission analysis and consider the military end-state desired. He then establishes the operational objectives; identifies both his own and the enemy's centre of gravity, and determines the sequence of decisive points along his lines of operations.

51. Once the commander has made his decision, he must then transmit his vision downward by articulating a clear statement of his intent and concept of operations. Throughout the subsequent planning process, the commander's vision, as expressed in the intent, must remain paramount. It should be clear that no amount of subsequent detailed planning can reduce the requirement for this clearly defined vision. The commander's intent becomes the heart and soul of a successful campaign plan.

CHAPTER 4 THE CAMPAIGN PLAN

No plan survives contact with the enemy.

Field Marshal von Moltke

SECTION 1 DEVELOPMENT OF THE CAMPAIGN PLAN

1. The commander's intent is a direct statement of his vision for the conduct of the campaign. It establishes the conceptual framework for the campaign by focusing initial planning for staff and subordinates. The commander's intent is captured in the primary command and control instrument at the operational level, the campaign plan.

THE CAMPAIGN PLAN

2. The campaign plan and its attendant planning process are techniques used to help the operational commander to flesh out his design, and to orchestrate operations and battles to conclude a conflict successfully. The campaign plan can be seen as a practical expression of the operational art. While highlighting the strategic aim, it provides focus and direction to subordinates planning and executing tactical missions.

3. Until the end-state is realized, the campaign plan must be continuously adapted to changing situations (ours and the enemy's), the availability of resources, and limiting factors. It must be recognized that an important feature of any plan, no matter how detailed, is its usefulness as a common basis for change. Detailed planning should not become so specific that it inhibits flexibility. In the words of General Eisenhower :

Rigidity inevitably defeats itself, and the analysts who point to a changed detail as evidence of a plan's weakness are completely unaware of the characteristics of the battlefield.

4. There is no standard format for a campaign plan. In fact, the utility of a formal campaign plan diminishes as the scale of contemplated operations and the imminence of hostilities decreases. Therefore it may not always be required,

especially for peacetime deliberate planning. Regardless of whether or not a campaign plan is produced, the operational commander includes the equivalent of the "plan of campaign" within the concept of operations portion of any plan prepared in response to strategic direction.

5. The campaign plan should be concise. It should describe, to subordinates and superiors alike, the end-state that will achieve the strategic aim; the overall concept and intent of the campaign; the enemy's operational centre of gravity; decisive points; and a tentative sequence of phases and operational objectives that will lead to success. It may describe the initial phases of the campaign with some certainty, but the design for succeeding phases will become increasingly general as uncertainty grows and the situation becomes unpredictable. Subsequent cycles of the Joint Operations Planning Process will create more detailed orders for each phase of the campaign.

The campaign plan is a practical expression of the operational art. Irrespective of the detailed format of the campaign plan, it should address the following questions :

What military conditions constitute success in relation to the strategic goal?

What sequence of events is most likely to produce the desired endstate?

How should the resources be applied?

6. It should also outline a theatre organization and a functional framework. These will facilitate integration of the combat functions and unify the efforts of subordinate commanders and staff, consistent with the commander's intent.

SECTION 2 THEATRE ORGANIZATION

7. In developing the campaign plan, the operational commander and his staff need a clear picture of the potential theatre organization and command relationships. The picture helps them clarify the different phases of the campaign, determine priorities and assign tasks.

THE BATTLEFIELD FRAMEWORK

8. The battlefield framework⁷ is the tool used to facilitate decentralization by identifying subordinate commanders and establishing command relationships for each phase of a campaign. The layout of the battlefield framework should flow from the campaign design and be related to specific decisive points and lines of operation.

9. There are several ways of dividing the theatre of operations, depending on the countries and resources involved, however most often it is subdivided into a number of **areas of operations**8. Each subordinate level of command will further define their area of operations by determining their **area of interest** and **area of influence**.

10. Decentralization is further enhanced by defining, within a particular area of operations, responsibility for **deep, close and rear operations**.

11. The operational commander may also divide the theatre into **Combat** and **Communications Zones** to complement the establishment of areas of operations, although often, especially in operations other than war, these terms may be irrelevant.

AREA OF OPERATIONS

12. Areas of operations are allocated to define the geographical limits within which a subordinate commander has the authority to conduct operations, coordinate fire, control movement, and develop and maintain installations. They are normally associated with specific operational objectives and one or more lines of operation. The commander's authority should also include the control of all joint actions supporting his mission and allow him to employ his organic and supporting systems to the full extent of their capabilities. The designation of an area of operations satisfies the commander's requirement for depth to

⁷ This is referred to as the "Battlefield Framework" in the US and the "Operational Framework" in the UK. In FM 100-5, the concept of "battle space" is similar to that of "area of influence" presented here.

⁸ For example the commander may also establish a Joint Operations Area (JOA), a Joint Zone (JZ), or Joint Special Operations Area (JSOA) as required.

manoeuvre and protect his force and to fight at extended ranges. The area of operations may be changed with a change in the mission.

13. At any one level of command, areas of operations will never overlap; conversely, in non-linear and dispersed operations there may be gaps between them. Boundaries and height bands may also be used to describe geographical limits of the area of operations.

AREA OF INTEREST

14. An area of interest is the three-dimensional space, defined in geographic terms, in which a commander wishes to identify and monitor those factors, including enemy activities, which may influence the outcome of current and anticipated missions. A commander will decide for himself how wide he must look - in both time and space - forward, above, laterally and to the rear.

15. His area of interest will most likely overlap those of adjacent forces. Therefore, coordination is required to ensure unity of effort. The scope of this wider view is not limited by the reach of his organic intelligence sources, but depends upon the location of friendly, enemy and other activities that may affect his operations. Where it does extend beyond his collection ability, it is the basis for integrating intelligence with other forces. Thus the commander at each level, having been given the geographical limits within which he will operate, then decides for himself how far beyond those limits to look, in time and space, for intelligence and warning.

AREA OF INFLUENCE

16. An area of influence is the physical volume of space within which a commander can directly influence operations by manoeuvre, information operations, or fire support systems under his command or control. It can be visualized as a three-dimensional "bubble" that moves with the force and expands and contracts depending on the type and location of organic and attached weapon systems. It also includes influence throughout the electromagnetic spectrum. Although it may change often, at any time it will be finite.

17. At higher levels of command, it is possible that the area of influence and area of operations may coincide. At lower tactical levels, terrain has a more restricting effect on reach and mobility. So, the area in which a force can bring

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combat power to bear at any time will vary. It can only really be judged by a commander, who needs constant awareness of his area of influence. If his reach overlaps adjacent forces, unity of effort is then essential. Ownership of assets or ground is less important than application towards a common purpose.

DEEP, CLOSE AND REAR OPERATIONS

18. The designation of deep, close and rear operations is a means of visualising operations and aiding synchronization. This distinction helps the commander relate friendly forces to one another, and to the enemy, in terms of time, space, resources and purpose. Deep, close and rear operations are focused on attacking the enemy's cohesion and will be conducted on both the moral and physical planes. There are no strict divisions between deep, close and rear operations and it is incumbent upon the commander to decide which formation or function is best suited and placed to be used in each type of operation. Deep, close and rear areas may overlap in time and space and some formation and units may engage in each at different stages.

19. **Deep Operations**. Deep operations are those directed against enemy forces and functions beyond the close battle. Deep operations seek to restrict the freedom of action of the opposing commander through pre-emption, disruption of the coherence and tempo of his actions, dislocation and destruction or neutralization of selected parts of his force. Although they may achieve, in themselves, an operational objective, or establish favourable circumstances for such an achievement, their primary purpose is to create favourable conditions for close operations. Therefore, an operational level commander may have great interest in the sequencing and coordination of a tactical commander's deep battle.

20. Deep operations include passive measures such as deep reconnaissance, intelligence collection, surveillance and target acquisition, and active measures such as interdiction or selective psychological attack. They are usually conducted at long range and over a protracted timescale.

21. The scope of deep operations extends to a variety of tasks such as raids or attacks into the enemy's rear areas, or surveillance and target acquisition. The tools available to the operational commander to prosecute deep operations range from armoured or aviation formations and units to air power, naval fire support, electronic warfare assets, psychological operations, deception and special forces. The operational commander should designate one subordinate to command and

coordinate deep operations to simplify synchronization and avoid conflict with other deep or close operations.

22. **Close Operations**. Forces in immediate contact with the enemy, in the offence or defence, are conducting close operations. Close operations include tactical battles and engagements with enemy forces, and other actions. They are conducted to achieve, or contribute to the achievement of operational objectives. They are usually conducted at close range in a short time-frame and their effects are likely to be immediate and tangible. Close operations achieve their effect by direct action against enemy combat power, and the means may range from destruction to blocking.

23. Close operations may include combat and non-combat operations using all of the combat functions. Integration of these functions to achieve preemption, dislocation or destruction of the enemy is the essence of tactical level command.

24. Command of close operations is normally best conducted by subordinate tactical formation or unit commanders. They are well placed to plan and direct the conduct of close operations and can use their initiative, consistent with the commander's intent, to adjust to fluid changes that occur in contact with the enemy.

25. **Rear Operations**. The purpose of rear operations is to ensure friendly freedom of action by protecting the force, sustaining operations and retaining freedom of action of uncommitted forces. They are fundamental in ensuring that the friendly force centre of gravity, the lines of operations and the sequencing of actions are protected. Rear operations are not synonymous with combat service support activities and are much wider in scope. Rear operations include reception, assembly, movement and security of reserves and reinforcements, Host Nation Support, lines of communication, and also support for and protection of civilians and civilian installations.

26. In the interest of economy of effort rear operations must be focused clearly to support the commander's intent. Therefore, there is a need to balance resources between protection and sustainment efforts. Rear operations will be the target of enemy deep operations, and although physical protection is important, rear operations must not neglect moral protection against deception, and psychological attack. Gaining public support by winning the hearts and minds of the local civilian population is an essential part of rear operations.

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27. Forces within the rear area of operations may need to conduct battles and engagements to eliminate an enemy threat. Therefore the command organization of rear operations needs to include the capability to gather intelligence, and to plan and mount operations, beyond its primary role of sustaining the force. To avoid potential clashes of interest or priorities, unity of rear command is essential. Thus, a commander for rear operations should be appointed at every level with clear command relationships to the forces located within his designated area of responsibility.

SECTION 3 INTEGRATION OF COMBAT FUNCTIONS AT THE OPERATIONAL LEVEL

28. The campaign plan derives from policy and requirements, sets operational goals, and is the basis for further detailed operational level planning. It will specify command, information operations, and sustainment relationships and the concepts for manoeuvre, firepower and protection. The integration of these functions is achieved using synchronization, tempo and the designation of a main effort as discussed in Chapter 2.

THE FUNCTIONAL FRAMEWORK

29. The functional framework is a tool used by the commander to define the relationship between the functional components necessary to support the campaign design and to unify their efforts toward a common goal. It can also be used to specify the commander's vision for the balance between centralization and decentralization of these functions. For example, the commander may determine the degree to which the location and control of logistics and intelligence assets are centralized or decentralized. Authority for some or all these functions may be delegated to subordinate commanders.

30. Functional activity can be focussed to achieve operational objectives either along separate lines of operations, or to reinforce or support lines of operations tied to the battlefield framework. Most of these functional activities transcend several levels of command and overlap areas of operation. Therefore the functional framework can be visualized as being superimposed on the battlefield framework. In contrast with the use of a hierarchical battlefield framework, information relating to the functional framework, in such areas as logistics, movement control, air defence warning, intelligence and other areas can be readily accessed through inter-netted and non-hierarchical information systems. Some functions such as fire support will be exercised by both means.

It is a command responsibility to ensure that functional activities are coordinated with command responsibilities at all levels to best achieve the synergy of all force activities.



Figure 4-1: Relationship of Functional and Battlefield Frameworks

OPERATIONAL LEVEL COMMAND

31. Command is the glue that binds the combat functions together, at any level. Operational command includes establishing the decision-action cycle and the attendant operations planning process; establishing the command support system; specifying the organization of command and command relationships; and establishing the battlefield framework.

OPERATIONAL INFORMATION OPERATIONS

32. At the operational level, information operations are continuous. In peacetime, they support deterrence and reassurance, improve understanding of the situation, support contingency planning, and training. Information operations greatly expand a commander's area of influence, and include interaction with the media, industry, joint forces, multinational forces, and computer networks worldwide. In operations, they help the commander seize, and maintain the initiative, and synchronize the other combat functions.

OPERATIONAL MANOEUVRE

33. Operational manoeuvre is the disposition of forces to create a decisive impact on the conduct of the campaign by either securing the operational advantages of position before battle is joined or exploiting tactical success to achieve operational or strategic results. Operational manoeuvre usually takes large forces from a base of operations to an area where they are in a position to achieve operational objectives. Once deployed into battle formations in the area of operations, manoeuvre is normally considered tactical in nature.

34. Obtaining a superior advantage over the enemy allows the commander to move his land, sea and air forces to the optimum positions before the start of hostilities. Operational manoeuvre, when integrated with joint operational firepower, can be decisive. However, to be successful, operational manoeuvre must be conducted with the security and freedom of action provided by operational protection. Besides conventional land, sea and air forces, the commander can also use special forces as a key element of operational manoeuvre.

35. Special Forces Operations. Special forces are troops selected, trained, equipped and organized to conduct specific operations in pursuit of strategic or other high level operational objectives. They may operate in support of conventional forces or independently.

36. The principal roles of special forces may include : reconnaissance, including information reporting and target acquisition; offensive action, which includes direction of air, artillery and naval gunfire, designation for precision guided munitions, and raids; work with indigenous populations; VIP protection; combat search and rescue and counter terrorist hostage rescue.

37. Special forces extend the conflict in depth. The effects may be purely physical through destruction, or they can achieve effects on the moral plane by creating confusion, uncertainty and surprise through unexpected actions and operating in enemy rear areas. Their influence will often be out of proportion to the size of forces involved. The mere existence of a special forces threat can have a significant adverse impact on the enemy's morale and cause an increase in the level of enemy forces dedicated to rear area protection. Similarly, special forces' support can significantly bolster moral will and physical efforts of friendly indigenous factions.

38. Special forces should be employed on high value tasks, exploiting their potential while limiting their vulnerability. They should be commanded at the

highest appropriate level, and be tasked using operational directives that allow maximum freedom of action for conduct of operations. Special forces operations however, must be coordinated with tactical conventional operations. They rely heavily on surprise and must also have access to the highest level of intelligence to conduct operations and facilitate precision targeting. Consequently, their operations require tight security measures, as compromise may come with serious penalties. Public information plans should normally neither confirm nor deny special forces activity.

OPERATIONAL FIREPOWER

39. Operational firepower is the application of lethal and non-lethal firepower to achieve a decisive impact on the conduct of the campaign or major operation. Operational firepower can provide the destructive force essential to defeat the enemy's ability and will to fight.

40. Firepower and manoeuvre are not interchangeable at the operational level; each has a distinctive quality, complementary to the other. Operational firepower is normally furnished by joint assets other than those required for the routine support of tactical manoeuvre. However, some assets such as air support and tactical missile systems can support both.

41. Operational firepower focuses mostly on one or more of three general tasks : facilitating operational manoeuvre; isolating the battlefield, and destroying critical functions and facilities. Manoeuvre is supported by creating delays in enemy movement, complicating enemy command and control, disrupting the sustainment of his forces and degrading his weapon systems. Isolating the battlefield could involve disruption of lines of communications, destruction of intelligence collection means and communications networks, and prevention of the move forward of reserve and follow-on forces. Operational firepower may also be used independent of manoeuvre to damage key enemy forces or facilities.

42. Commanders must understand the techniques of integrating air, naval and land firepower with manoeuvre, information operations and protection.

OPERATIONAL PROTECTION

43. Operational protection consists of active and passive measures taken to counter the enemy's firepower and manoeuvre by making soldiers, systems and
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operational formations difficult to find, strike and destroy. At the operational level it includes activities such as theatre air and missile defense, NBC defense measures, protection of non-combatants, security of lines of communication and the construction of major obstacle systems. Protection enhances the freedom of action of the friendly force while conserving and protecting it from enemy actions.

44. To be effective, protection measures must be fully coordinated with the other combat functions, including the protective aspects of information operations, such as defensive command and control warfare, deception and operations security (OPSEC).

OPERATIONAL SUSTAINMENT

45. Success depends on effective sustainment. Commanders require a clear understanding of the administrative factors that affect their selection of a target centre of gravity, decisive points and lines of operation. Adequate direction must be given to administrative planners for them to determine the feasibility and sustainability of a campaign design. The commander is responsible for developing the concept and the overall plan for the use of administrative resources.

SECTION 4 CONTINGENCY PLANNING

46. Options must be built into a campaign to anticipate opportunities or reverses and preserve the commander's freedom of action. Contingency planning gives the commander the flexibility to retain the initiative. The planned sequence of events to the desired end-state is not immutable. Therefore, a commander must be prepared to adjust the sequence, quicken or reduce the tempo, or develop new options to seize unforeseen opportunities that unfold themselves.

47. Continuous contingency planning will keep a range of options available for commanders to maintain agility and tempo. These options may be incorporated into the initial plan, enabling a commander to adjust his lines of operations and vary his plans to offer or decline battle on his own terms. Contingency planning should give the commander the freedom of action to maintain the initiative, or to regain initiative if a developing situation results in its loss. This can be accomplished by developing branches and sequels.

BRANCHES AND SEQUELS

48. **Branches** are contingency options built into the basic plan for changing the disposition, orientation, or direction of movement and for accepting or declining battle. They give commanders flexibility by anticipating enemy reactions that could alter the basic plan.

49. **Sequels** are subsequent operations based on the possible outcomes of the current operation--victory, defeat, or stalemate. A counter-offensive, for example, would be a logical sequel to a defence. Executing a sequel will normally mean beginning another phase of the campaign. This is a continuous process during operations. The commander should never be without options.

SECTION 5 SUMMARY

50. The campaign plan outlines how each phase of the campaign is conducted in sequence to achieve decisive points and ultimately to eliminate the enemy centre of gravity. The plan can only be as good as the original campaign design, which is formulated by the commander. His vision, and a well-articulated statement of his intent, are the most important elements in the entire process of campaign planning.

51. Synergy depends in large part on the commander's ability to integrate activities along selected lines of operations using both the battlefield and functional frameworks. These are used to implement decentralization and coordinate the efforts of subordinate commanders and the staff. The battlefield framework is generally related to terrain and each area of operations is related to one or a number of lines of operations. On the other hand, the functional framework is related to the integration of the operational functions through the designation of main effort, synchronization and tempo during the conduct of the campaign.

CHAPTER 5 CONDUCTING THE CAMPAIGN

Many years ago, as a cadet hoping some day to be an officer, I was poring over the 'Principles of War,' listed in the old Field Service Regulations, when the Sergeant-Major came up to me. He surveyed me with kindly amusement. "Don't bother your head about all them things, me lad," he said. "There's only one principle of war and that's this.

Hit the other fellow, as quick as you can, and as hard as you can, where it hurts him most, when he ain't lookin'!"

Field Marshall Sir William Slim

SECTION 1 GENERAL

1. The overriding consideration in conducting the campaign is an unwavering focus on the requirements of the strategic objective. The aims, resources, and limitations established by the strategic level become the filter through which all actions are viewed, even if, as at the lower echelons of command, the connection with strategy is only derivative. This is done by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, and initiating actions and applying resources to bring about and sustain those events.

2. Command at the operational level involves deciding when, where, for what purpose, and under what conditions operations against the enemy are to be conducted. This includes deciding when to give - and to refuse - battle. The operational level governs the deployment of forces, their commitment to or withdrawal from combat, and the sequencing of successive tactical actions to achieve strategic objectives.

SECTION 2 PREPARATION AND DEPLOYMENT

3. The first stages of conducting the campaign, whether it is for domestic or overseas operations, normally includes the preparation and deployment of the

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force. This entails establishing a point of entry, securing a base of operations, building-up the complete force, and preparing to execute the campaign.

4. Coordination of movement and logistics support during deployment is essential. Deployment is primarily a strategic responsibility. However, the flow into the theatre should be monitored and, where facilities (e.g., airfields or ports) are limited, it should be coordinated by the operational commander. All deployment planning should be based on the commander's intent so that the right equipment and personnel arrive at the proper time. The commander must insist on the correct phasing and balance of the combat functions to develop operations in line with the campaign plan. The force may be vulnerable in the early stages of a conflict and therefore, it must have satisfactory combat power, robust command and control, and infrastructure elements to adapt to changes in the situation.

5. Consideration should be given to the commencement of information operations early in the campaign. Activities such as collection of intelligence, extension of information networks, deception, electronic warfare (EW), operations security (OPSEC), psychological operations, and public affairs often take time to produce results, but may not require extensive personnel resources. They can be conducted using the concept of "split-basing" where the majority of resources are located in Canada or another forward location. Information operations also give the commander flexibility to begin the conduct of operations without committing him irretrievably to a particular course of action.

6. The organization for the movement of the force will differ, depending on whether or not the entry is opposed. If it is, then movement will be tactical with formed combat units leading. If unopposed, movement may be administrative with units sub divided to make the most efficient use of the available transport.

7. Preparations for the campaign will also include preparing personnel for the mission through realistic pre-deployment and in-theatre training. The operational commander must provide direction to his subordinates to facilitate focused training in line with the commander's intent. He must also train the senior commanders and staff, and get to know them personally. This fosters trust and mutual understanding, and can rectify weaknesses and misunderstandings.

8. These personnel preparations must focus on the cohesion of the force. While destroying enemy cohesion is an essential element of success, building friendly force cohesion is equally important to avoid one's own defeat. The force will often be "ad hoc" in nature and may include personnel from other environments and nations who have never worked together. In these cases, trust and mutual understanding will have to be built in the time available until all elements function together as a team. This can be achieved partly through the training process. However, the commander must ensure that before the commencement of operations, all soldiers are motivated, understand the commander's intent, and are confident in their ability to achieve the mission.

SECTION 3 COMMANDING THE CAMPAIGN

9. After preparation and deployment are complete, the mission set, and orders issued, the operational commander focuses his efforts on establishing positive conditions for operations to occur in accordance with his campaign design. He does this by employing a number of tools to shape the battlefield that are not normally available to tactical commanders. These include, but are not limited to : the use of operational reserves, air interdiction, special forces, major airborne, airmobile and amphibious forces, tactical and cruise missiles, theatre level intelligence assets, deception, and control over the allocation of theatre level logistics stocks. While the tactician prepares and fights the battle, the operational commander must look beyond the battlefield in both time and space to make the best use of his resources.

OPERATIONAL PERSPECTIVE

10. The commander must maintain a broad perspective on the campaign. In Field Marshal Slim's words, he must "THINK BIG." He must avoid the temptation to over control tactical activities thereby losing his wider perspective. The operational commander must understand how events at the strategic, operational and tactical levels are intertwined and affect each other.

11. As the campaign forms the framework for combat, so do tactical results shape the conduct of the campaign. At the operational level, the task is to exploit tactical victories to strategic advantage and to minimize, nullify, or even reverse the strategic effect of tactical losses. The commander uses events to create the most favourable conditions possible for those actions he chooses to fight. Tactical results will impact on the progress of the campaign, so he must have the flexibility to react to any changes. He seeks to anticipate the results of combat and to be prepared to exploit them to the greatest strategic advantage.

FREEDOM OF ACTION

12. To allow freedom of action for subordinates, the operational commander must first obtain maximum freedom of action for himself from the strategic authority. Military freedom of action is ultimately built upon the trust of the public and therefore the government. Diplomatic, economic and informational efforts at the strategic level can greatly increase the operational commander's flexibility and freedom to act. Sufficient logistic and personnel resources, reasonable and clear limitations, and good operational security also contribute to freedom of action at the operational level.

13. Other elements, however, may affect freedom of action such as sophisticated information technology and the nature of modern news reporting, which make tasks of ensuring operations security and surprise more difficult. Perhaps the greatest threat to freedom of action at the operational level is the capability, through information technology, to over-control operations from the strategic level, especially when they have a high media profile. This tendency must be avoided to allow subordinate commanders to maintain an appropriate degree of authority and flexibility to respond quickly to changing circumstances.

14. Once the degree of freedom of action has been obtained at the operational level, the commander must decide how much freedom of action that subordinates can be allowed at various stages of the operation. In doing so, the commander must find the correct balance between centralization and decentralization.

15. Although, modern technology allows operational commanders to communicate and direct actions at the lowest levels, operations may have to be conducted in a severely degraded communications environment. Clear and simple orders, with a clearly understood commander's intent, enable subordinates to exercise disciplined initiative and flexibility while pursuing the commander's goals and priorities.

OPERATIONAL LEVEL INTELLIGENCE

16. A prerequisite for the conduct of successful operations is timely and accurate intelligence as part of information operations. Compared with tactical intelligence, operational level intelligence must take a wider view beyond terrain and a longer view over time. At this level, the opposing commanders will likely be known by name and personality specific information will be essential. As the operational level of war is less a mater of actual figting and more a mater of

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schemes and intentions, operational intelligence focuses less on current combat capabilities and more on forecasting future enemy capabilities, intentions and options.

Therefore, determine the enemy's plans and you will know which strategy will be successful and which will not; Agitate him and ascertain the pattern of his movement. Determine his disposition and so ascertain the field of battle. Probe him and learn where his strength is abundant and where deficient.

Sun Tzu

By far the majority of winners in battle in which the beginning force ratios were generally within... "reasonable" limits...were those who somehow seized the initiative from the enemy, and held it to battle's end.

Gen D. Starry, US Army Commander TRADOC, 1977-1981

17. Operational intelligence supports the commander's continuous search for enemy weaknesses and intentions. This information is essential for disrupting the enemy's campaign plan and attacking his centre of gravity.

SECTION 4 CONDUCT OF THE CAMPAIGN

SEIZING AND MAINTAINING THE INITIATIVE

18. The key to success at both the operational and tactical levels, whatever theatre or type of conflict, is the early seizure of the initiative, and its maintenance, so that the enemy is forced to comply with the commander's will.

19. At any level, the commander that has the initiative will be able to pursue his desired course of action. He will be able to foil the enemy's plans and force him to conform to his own campaign plan. This will lead to a rapidly deteriorating situation as the enemy is forced to react to the commander's actions, and he will be unable to determine when and where tactical battles and engagements will occur. Therefore it is a fundamental concern of the commander to seize the initiative, maintain it and regain it if it is lost. Only by

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doing so can he dominate and begin to impose his will on the enemy. This is a prerequisite for achieving the chosen operational objectives and destroying or neutralizing the enemy centre of gravity. Dominating the enemy is accomplished by viewing the campaign, and its component operations and battles as the interplay of the two dynamic forces of fixing and striking.

20. The initiative can be seized by a combination of fixing enemy strength and striking enemy weakness on both the moral and physical planes of conflict. A campaign may be designed to fix the enemy initially by denying him his objectives, robbing him of his freedom of action, and shaping events in preparation for subsequent action. Subsequently, commanders should plan to strike the enemy by pre-emption to seize and exploit the initiative, then to defeat the enemy at successive decisive points and move the force toward the defeat or neutralization of the enemy's centre of gravity.

21. At all levels, commanders attempt to ascertain the enemy's intentions; identify his main effort; isolate and target elements critical to his cohesion; manipulate his perceptions; delay enemy reinforcements by interdiction; and degrade critical enemy functions such as command and control, information operations, offensive air support or logistics.

22. Commanders conduct these activities in coordinated defensive and offensive operations -both of which aim toward achieving operational objectives. Activities related to the functional framework are planned to occur simultaneously, or in sequence, throughout the battlefield framework, thus overloading and putting the enemy commander off balance.

ТЕМРО

23. A faster relative tempo will allow us to seize the initiative and dictate the conduct of operations. Tempo incorporates the capacity of the force to transition from one operational posture to another. By increasing and varying the tempo, or rhythm, of operations, one side seeks to impose threats to which the enemy is increasingly unable to react. It is focussed on completing the decision-action cycle faster than the enemy such that his responses are made increasingly inappropriate.

24. Tempo does not imply an ever increasing speed of operations. Rather, it is the competitive pace of operational change. While dictating the tempo, one must be careful not to establish a pace that cannot be maintained.

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25. Commanders set and hold the desired tempo to achieve the proper sequencing of events. Subordinate tactical commanders attempt to establish tempo commensurate with the operational commander's design. There must be flexibility in both cases to compensate for unexpected success or failure at either level.

MAIN EFFORT

26. The purpose of designating a main effort is to achieve unity of effort and maximize combat power through integration of the combat functions. The use of the term main effort must therefore be understood and applied in an appropriate way at all levels of command. Once the commander has established his main effort as that crucial activity that is essential to the success of his mission and has ensured that it is known by his subordinates, it is their duty to do their utmost to support that main effort.

27. Initially the main effort may be to fix the enemy at his point of strength, prior to shifting the main effort to striking him at a point of relative weakness. However, the commander will not plan to shift his main effort lightly, and can only do so if he has the means available and the time required to effect the shift. Repeatedly shifting the main effort may cause confusion and have the undesired effect of dissipating combat power instead of achieving concentration. On the other hand, a failure to shift the main effort at the appropriate time will result in an inflexible plan, incapable of adjusting to the chaos and uncertainty of operations.

HISTORICAL PERSPECTIVE

Before Montgomery's assault [across the Rhine in March 1945] was launched, ...the Allies had already crossed the Rhine elsewhere. The First United States Army was exploiting its Remagen bridgehead in the direction of the Sieg River. Farther south, above Mainz, General Patton beat Montgomery to the east bank by nearly a day. But Montgomery's bridgehead, in accordance with the decision of the Combined Chiefs of Staff, remained the point of main effort.

Colonel C.P. Stacey, The Victory Campaign

SYNCHRONIZATION OF DEEP, CLOSE AND REAR OPERATIONS

28. Within their respective areas of operations, commanders at all levels direct the conduct of deep, close, and rear operations simultaneously, or in rapid succession, in a way that appears to the enemy as one continuous operation against him. Fighting within the battlefield framework thus requires continuous coordination of a variety of assets, including space-based systems, air and maritime elements to achieve a synergistic effect.

29. Deep operations set the conditions for decisive current and future close operations. However, the enemy is best defeated by fighting him close and deep simultaneously. Attacking enemy formations in depth disrupts, dislocates, or reduces enemy combat capabilities, degrades cohesion and hastens enemy defeat. These operations enable friendly forces to choose the time, place, and method of conducting close operations.

30. The synergy achieved by integrating and synchronizing friendly manoeuvre and air interdiction produces significant advantages, especially at the operational level. Potential responses to synchronized manoeuvre and air interdiction can create a dilemma for the adversary. If he attempts to concentrate his forces against the manoeuvre, he can be exposed to unacceptable losses from air interdiction. If the enemy disperses to reduce air interdiction losses, his forces may not be able to respond to the manoeuvre.

31. Synchronization of deep, close, and rear operations is a complex undertaking that must be balanced with the requirements of a command philosophy that emphasizes decentralization. It requires a clear understanding of the commander's intent and main effort throughout the force, stimulating both command and staff initiative. Continuous synchronization is neither possible nor desirable and the emphasis should be on using synchronization to produce maximum combat power at the decisive time and place.

SECTION 5 OFFENCE AND DEFENCE AT THE OPERATIONAL LEVEL

32. At the operational level, the primary land operations of war are the *offence* and the *defence*.⁹ Together these operations permit a degree of flexibility

⁹ At the tactical level the operations of war are the offence, the defence, and the delay, as outlined in B-GL-300-002/PF-000.

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and fluidity in the land battle and allow the tempo to be varied. Defence and offence may be conducted simultaneously or sequentially throughout the campaign.

33. A commander at any level must be able to use offensive or defensive operations in combination and flow from one to the other. For example, he may use economy of effort through defence in one sector to allow concentration of force for an offensive in another sector. An operational level defensive may incorporate tactical level offensive actions and vice versa. In essence they are each part of the same continuum and have a common purpose - to defeat the enemy by shattering his moral and physical cohesion. The commander must find the balance between the two forms of action. He must always be ready to take actions to seize the initiative, maintain it and regain it if lost.

34. Commanders may be presented with a variety of options for the conduct of offensive and defensive operations ranging from a **linear** framework with clearly defined geometry and lines with contiguous units to a less precisely structured **non-linear** framework. In linear operations, emphasis is placed on maintaining the position of the land force in relation to other friendly forces. As a result, security is enhanced and massing of forces is easier to accomplish. Also inherent in linear operations is the security of rear areas, especially lines of communications.

35. However, the increase in lethality, dispersion and depth of modern operations leads to a greater potential for them to be non-linear. In these operations, forces tend to focus on assigned objectives and less on their geographic relationship to other friendly forces. Forces conducting non-linear operations must rely more on a shared view of the battlefield, mobility and freedom of action. They must have the ability to mass the effects of combat power at a decisive point from dispersed locations and rapidly disperse again. Rear areas may not be clearly defined and less secure, leading to the requirement for innovative sustainment options.

THE OFFENCE

36. The purpose of offensive operations is to impose one's will upon the enemy by the focused application of force, when and where required to achieve military objectives. Successful offensive operations are often decisive. The types of offensive operations include reconnaissance in force, raids, feints and demonstrations, counter-attacks and spoiling attacks, hasty attacks and deliberate attacks.

37. Offensive operations are conducted to achieve operational objectives as part of an overall campaign. This is accomplished by seizing and maintaining the initiative. Once the initiative has been won, the commander continues offensive action to control the tempo of operations to achieve an irrepressible momentum. Synchronized deep and close operations are focussed through decisive points to attack the enemy centre of gravity. The commander will seek concentration to achieve overwhelming combat power where and when required, to produce a breakthrough that can be followed by ruthless exploitation.

38. Successful offensive operations require manoeuvre. At the tactical level, manoeuvre must be conducted to create the conditions for further exploitation. At the operational level, forces should be tasked to exploit the results of battle by penetrating deep into the enemy's rear areas and gaining the exponential advantages of a successful pursuit. The various forms of manoeuvre in the attack include : frontal, penetration, envelopment (or flanking attack), turning movement, and infiltration.

39. Offensive operations are used to defeat the enemy. However, inflicting physical damage is merely a means to success. The real damage is to the enemy's will by destroying the coherence of his forces, fragmenting and isolating his combat power, and shattering his cohesion. By operating throughout the depth of the area of operations, the effects of the elements of combat power are integrated through tempo, synchronization and designation of the main effort.

FORMS OF MANOEUVRE
Frontal
Penetration
Envelopment
Turning Movement
Infiltration

40. Offensive action can also be used to seize ground, fix the enemy as an economy of force measure, gain information through reconnaissance in force, or deceive the enemy as to the time or place of the main effort.

THE DEFENCE

41. Although the offence is normally decisive, operational circumstances may compel the commander to adopt the defence. Defensive operations may be imposed through strategic direction, or the commander's freedom to initiate offensive action may be denied either for political reasons or because his combat power is weak. In some cases, defensive operations alone will deliver a favourable and decisive outcome to a campaign, depending on the desired end-state. Once defensive operations have been initiated, the immediate purpose is to defeat or deter a threat in order to provide the right circumstances for further action.

42. An attacker normally determines the time and location of his attack and can mass his forces whenever he wishes. He will normally seek out operational level centres of gravity, attempting to disrupt the tempo of current operations and the planning and preparation of future ones.

43. An effective defence is therefore rarely passive, and it is desirable to incorporate aggressive offensive action to pre-empt, dislocate or disrupt the enemy whenever possible. This is done on the moral plane by fixing the enemy by deception and encouraging him to make inappropriate plans, luring the enemy into situations where one can exploit surprise, denying the enemy information, and striking at his cohesion. On the physical plane deep operations are conducted to fix the enemy by denying him freedom of action, and striking in order to dislocate his potential for offensive manoeuvre, and disrupt his ability to pass orders.

44. Defensive operations are not a reactive form of warfare. They aim to create the right conditions for achievement of decisive points and offensive action to eliminate the enemy's centre of gravity. In conducting the defence, the aim will generally be to limit the enemy's freedom of action and to develop the conditions for future offensive operations. Therefore, warfare contains elements of offence and defence, with each type of operation happening sequentially, simultaneously, or both, within an area of operations.

RESERVES

45. A significant concern in offence and defence will be the defeat of the enemy's operational reserves and the commitment of our own reserves at the decisive time and place. Reserves are those forces that provide the commander with an element that is free to manoeuvre to meet an anticipated threat, to

reinforce success, or to complete the destruction of the enemy. Reserves may be used to react to the developing situation as a hedge against the unexpected, and they are given planning options, not specific missions. Once it is committed, the commander must immediately begin reconstituting his reserve.

46. The commander uses his reserves to ensure success, not to reinforce failure. They can be used to exploit opportunities, fix the enemy in order to regain the initiative, or to achieve operational objectives through deep penetration. The challenge is knowing when and where to commit the reserve.

47. The employment of reserves may be the most crucial decision that the operational commander makes. The ability to know, or sense, when is the decisive moment to commit the reserve is part of operational art. This commitment may entail risk and must be balanced with the possibility of overcommitting the force and reaching a culminating point.

CULMINATING POINT

48. An operation, battle or engagement reaches its **culminating point** when the current situation can just be maintained but not developed to any greater advantage. Identifying a culminating point in terms of time and space is a difficult task for any commander, because there is a natural temptation to make one further effort to achieve an objective.

49. Because operations, battles and engagements cannot be conducted indefinitely, the commanders at all levels must pay close attention to the sustainment of forces, their morale and physical condition, and know the limit of their fighting power.

50. If necessary, a commander will order an **operational pause**. The initiative can be retained by ensuring that when an operational pause is imposed on one line of operations, the level of activities on another must be increased. This may include use of a stepped-up air programme, deception, use of special forces, a temporary reversion to the defence, or political and diplomatic actions. By employing units held in reserve, depleted units can be sent to the rear for rest, replacement and replenishment, thereby denying the enemy time to regroup or regain the initiative.

51. The notion of a culminating point applies to enemy as well as friendly forces. Assessing when, where, and under what conditions the enemy is likely to reach his culminating point is essential to the conduct of operations and the

decision to commit reserves. Actions may be taken specifically to force the enemy to over extend himself and outstretch his resources.

USE OF FORCE GUIDELINES

52. Control of the use of force is an important aspect of all military operations. The Canadian Forces will be involved in either **domestic operations** (discussed in Chapter 7) or **international operations**. International operations may be conducted under **Chapter VI of the UN Charter** (e.g., peacekeeping), where the use of force is normally restricted to self-defence; under **Chapter VII of the UN Charter** where a range of actions from embargos to the "use of such force necessary to maintain or restore international peace and security" is permitted; or as **war**.

53. The overuse or under use of force may affect a mission's success and can lead to unnecessary loss of human lives, damaged property, destruction of natural resources, and alienation of the local and international public. Therefore, commanders at all levels must be provided with clear direction and orders that control the use of force. This direction is based on the guidance of *Canadian Law*, which encompasses both domestic and international law, *the law of armed conflict (LOAC)*, *self-defence* and *rules of engagement (ROE)*.¹⁰

54. The modern law of armed conflict has its sources in international conventions, international customs and practice, general principles recognized by civilized nations, and national and international court rulings. The basis for the law of armed conflict are the Hague Conventions of 1907 and the four Geneva Conventions of 1949, which have been supplemented by the Protocols to the Conventions. The law of armed conflict is not intended to inhibit commanders in their use of force to accomplish military missions, but to protect combatants and non-combatants from unnecessary suffering; protect property of historic, religious or humanitarian value and the environment from unnecessary destruction; and facilitate the restoration of peace upon the conclusion of hostilities. It is based on the concepts of military necessity, humanity and chivalry and is applicable in all conflicts.

¹⁰ Full details are included in B-GG-005-004/AF-005, *Canadian Forces Operations*. Use of force guidelines for operations other than war are discussed in Chapter 7.

55. Canadian Forces personnel are always entitled to use force, up to and including deadly force, in self defence, defence of other Canadian Forces personnel and other Canadian Forces units in either peace, conflict or war. In some circumstances, even in times of peace, Canadian Forces personnel may be entitled to protect others and, in some international operations, property.

56. Rules of engagement are directions and orders issued by the strategic authority regarding the use of force in peacetime, periods of tension, and armed conflict. They constitute lawful commands that are designed to remove any legal or semantic ambiguity that could lead a commander to violate national or combined policy by inadvertently under reacting or overreacting to an action by foreign forces. Military, political, diplomatic and legal factors are all reviewed when considering the authorization of rules of engagement. They can also be used to provide direction on when force can be used to protect larger national interests, or to defend against larger scale attacks on an operational or strategic level or to protect other foreign forces or non-military individuals. Rules of engagement will be tailored as required for each operation and may change as the tactical, operational, political or diplomatic situation dictates.

57. In combat operations, the operational commander must be able to seek out, engage and destroy the enemy in accordance with the principles of war, the law of armed conflict and the assigned mission. In some cases, even in the absence of a declaration of war by an opponent, specific direction from the strategic authority may suspend all rules of engagement permitting unrestricted combat operations. On the other hand, these combat operations may be limited by the strategic authority through conflict rules of engagement which may introduce restrictions on operations for political, operational or safety reasons. In other cases, for example Chapter VI operations, Canadian Forces personnel may be restricted from the use of force except in self-defence unless specifically authorized by rules of engagement. Therefore, the operational commander must ensure that he fully understands the strategic guidance on the use of force, and seeks clarification if any ambiguities exist.

58. Although there may be formal guidelines for the use of force on operations, they will not cover all situations. At times when the appropriate action is unclear, the use of force by commanders and soldiers must be guided by their professional ethos and the law of armed conflict.

SECTION 6 CIVIL-MILITARY COOPERATION

59. The primary objective of civil-military cooperation (CIMIC) is to achieve the co-operation between civil authorities and military forces needed to ensure effective planning, preparation, support and execution of military operations.

60. For all operations, CIMIC may be critical to the achievement of military objectives. On the one hand, CIMIC can enhance support to an operation by obtaining supplies, information, facilities, services and labour resources with the cooperation of the local population. On the other hand, uncoordinated movement of civilians in the vicinity of operations, hostile actions by the population, or failure of the population to cooperate with friendly forces can significantly disrupt military operations.

61. The operational level commander may also have certain explicit or implicit responsibilities for civil administration within his theatre of operations. He may have to consider the movement of refugees and minimising damage to civil infrastructure, in addition to his legal, moral, and ethical obligations to minimise civilian casualties. Once the operations have ended, the military may be the only form of government and authority in the area, and therefore responsibilities for civil affairs will assume greater importance, at least during the transition to civil control.

62. CIMIC is divided into two categories : civil-military operations (CMO) and support to civil administration. CMO are conducted to support the operational commander's mission and Canadian national policy. CMO include Host Nation Support, military civic action, population and resources control, humanitarian assistance (see Chapter 7), and civil defence. Support to civil administration is assistance to stabilize a foreign government. Such support results from the direct military involvement in executive, legislative or judicial areas of civilian government. Only CMO will be discussed here. CIMIC is covered in more detail in B-GG-005-004/AF-000.

HISTORICAL PERSPECTIVE

While the Canadian Army conducted combat operations to liberate the Netherlands in April 1945, the situation in the western part of the country was such that the inhabitants were in danger of starvation. As a result, there was political pressure by the Dutch authorities in London for action to be taken. The problems of possible food shortages and disease had been included in allied plans, and as early as May 1944, the Combined Chiefs of Staff laid down broad policies covering distribution of relief supplies in liberated countries. There were Civil Affairs and Military Government staffs established at Headquarters First Canadian Army and at each Canadian corps headquarters, including over 130 officers who had been trained on the Canadian Civil Affairs Staff Course since October 1943.

In February, the Headquarters Netherlands District was created to bring in and distribute relief supplies. On 13 April it came under General Crerar's operational command, and was placed under 1st Canadian Corps, commanded by General Foulkes, on 24 April. During this period the situation deteriorated. For example, when the town of Apeldoorn was liberated on 17 April, the population was swollen by 65,000 refugees. The day after the liberation, 40 tons of food were distributed to the inhabitants. Other problems included supply of clean water, electricity and coal and repair of roads. These activities continued while normal combat operations continued at the front.

Finally on 28 April 1945, political and humanitarian factors forced a temporarily suspension of military operations and a truce was arranged with the Germans. It was agreed that they would not carry out further flooding and that land and water convoys would be allowed to cross German lines. Detailed arrangements were made between General Foulkes and the chief of staff of the German military commander. By 3 May convoys were delivering approximately 1000 tons of food daily across the truce line and this was supplemented by the air drop of a total of over eleven million rations. The operations continued after the cessation of hostilities on 5 May and the formal surrender on 7 May.

The immediate crisis was over by 12 May, and Headquarters Netherlands District assumed full responsibility for the relief and rehabilitation of the affected areas under the direction of 21st Army Group. The Canadian Army had made a significant contribution to the relief of suffering for the inhabitants of the Netherlands while at the same time conducting combat operations and post conflict activities. Beginning in May 1945, the Canadians became involved in more CIMIC related tasks including the organization of the Canadian Army Occupation Force which remained in Germany until June 1946.

HOST NATION SUPPORT

63. Host Nation Support (HNS) is normally obtained through agreements negotiated with a host nation to support exercises during peace and to prepare

Conducting the Campaign

for and provide support in times of crisis or armed conflict. The host nation provides the types and volume of support in accordance with these agreements and the laws of the host nation, based on its capability to provide such support. For operations in countries where there are no host nation support plans or other formal agreements for the procurement of support, ad hoc arrangements for support are established.

MILITARY CIVIC ACTION

64. Military civic action involves activities intended to win support of the local population for the military and for the local civilian leadership. It is one of the best ways to gain the moral initiative with the local population in war and especially operations other then war. Military civic action can help eliminate some of the causes of civilian unrest by providing such services as emergency food delivery, health care, by constructing or repairing schools, clinics or community buildings and other infrastructure such as roads and bridges.

POPULATION AND RESOURCES CONTROL

65. Population controls include curfews, movement restrictions, travel permits, registration cards and resettlement of civilians. Resource controls include licensing, regulations, checkpoints, road blocks, ration controls and inspection of facilities. Most military operations will require some type of population and resources control measures.

66. Dislocated civilians operations involve a special category of population and resources control. Dislocated civilian is a generic term that describes such categories of civilians as displaced persons, refugees, evacuees and stateless persons.

67. The involvement of multinational and voluntary organizations in dislocated civilian operations decreases the need for military resources. As well, non-military sources such as international aid organizations may assist civil authorities in dislocated civilian operations, provided the aid organizations are accepted by civil authorities or agencies.

SECTION 7 CONCLUDING THE CAMPAIGN

68. Military operations are conducted to end conflict in accordance with the strategic objective. Knowing when to end a campaign and how to preserve the objectives achieved are vital aspects of operational art. Therefore, military success should give political leverage to achieve the strategic objectives. Since war is fought for political aims, it is only successful when such aims are ultimately achieved. Success on the battlefield, however does not always lead to success in conflict. Making sure that it does requires the close collaboration of political and military leaders and clearly understood strategic goals.

69. It is always possible that for political, diplomatic or economic reasons the conflict may be terminated before the originally envisaged military end-state is reached. The commander must consider the consequences of a premature termination and the need for his force to take on new missions.

POST-CONFLICT ACTIVITIES

70. A period of post-conflict activities will exist from the immediate end of the conflict to the accomplishment of the national strategic goals and objectives. A variety of non-combat operations may occur during this period. This transition can occur even if residual combat operations are still underway in other parts of the theatre of operations. Anticipation and appropriate planning during earlier stages will smooth the transition during the critical period immediately after the fighting ends. Planning should also consider the use of information operations, especially public affairs and psychological operations (PSYOPs) to assist in the transition to post-conflict activities.

71. Military forces may be the only source of stability in the area and may have to restore communications facilities, essential services, and provide humanitarian relief. The operational commander may have to be the conduit for negotiations with the belligerent political and military leaders as part of the initial conflict termination process.

72. Military forces are very well suited for post-conflict operations. They have the skills and staying power to control prisoners, handle refugees, mark minefields, destroy unexploded ordnance, provide emergency health service support, provide restoration of essential utilities and other civil affairs, transport food and perform other required humanitarian assistance activities. However, they should always seek a quick transition to civilian control. The aim of post-conflict activities should be to speed up the stabilization of the area until

Conducting the Campaign

international, non-governmental or host nation agencies assume responsibility. As violence diminishes during an operation, military control and coordination will become less critical and the delicate transition between military and civilian control can take place. This transition is an important consideration at the operational level.

REDEPLOYMENT/TRANSITION TO FUTURE OPERATIONS

73. At the campaign's end, the operational commander must consider the redeployment of the force. Redeployment should not be considered as a final activity but merely a transition to future operations. Unit and formation integrity should be maintained during redeployment whenever possible and the commander should always keep in mind the reconstitution process for the next operation. This will include finalization of post operation reports and submission of observations as potential "lessons-learned."

74. Consideration must also be made for the reintroduction of troops into a peaceful western society after service in war-torn areas and after witnessing widespread pain, suffering and death. The efforts spent to build and preserve cohesion within a force prior to and during operations must be continued after redeployment. Commanders at all levels are responsible for the successful integration of their troops into post-conflict routine.

SECTION 8 SUMMARY

75. The campaign is conducted in line with the commander's guidance outlined in his intent and articulated in the campaign plan. In order to respond to changes as they occur, the operational commander must retain a wider perspective and maximum freedom of action.

76. The key to success in conducting operations is seizing and maintaining the initiative in line with the approach outlined in Chapter 2. Combat power is applied in offence and defence to achieve at success decisive points and ultimately achieve the military end-state. Concluding the campaign is an essential aspect of the design and planning and must be done in a way that reinforces political and diplomatic goals and allows the military presence to be reduced or removed.

ANNEX A THE JAPANESE SOUTHERN THEATRE OF OPERATIONS DECEMBER 1941-MAY 1942

STRATEGIC ENVIRONMENT

1. The Imperial General Headquarters (IGHQ), a strategic level joint headquarters, had conducted a strategic level assessment, based on political direction, and evaluated courses of action prior to August 1941. The **strategic direction** was clarified in a number of conferences in September, October and November 1941. In anticipation of operations, troops and supplies began being moved into forward staging areas at this time.

MILITARY END-STATE AND OPERATIONAL OBJECTIVES

2. The IGHQ issued their strategic direction confirming the **end state** as : occupation of strategically important regions in the south, reduction of the main far eastern bases of the allies and setting of conditions for further operations (see Figure 5A-1).

3. At the strategic level the **centre of gravity** was allied naval power in the South Pacific. The other objectives could not be occupied and held without control of the seas. This led to the selection of three main **decisive points** with their associated **lines of operation** : attacking the US Pacific Fleet at Pearl Harbour; occupying the Philippines; and the capture of the Singapore naval base.

SEQUENCING

4. After consideration of various options and the necessity to maximize surprise it was decided to conduct simultaneous attacks at Pearl Harbour, with landings in Philippines and Malaya on 7/8 December 1941. At the same time Hong Kong would be occupied and a combination of military pressure and diplomatic efforts would be used to sway Thailand to facilitate Japanese operations in Malaya and Burma without the need for combat operations against the Thai army.

5. The **main effort** would initially be on the Malaya campaign with the secondary effort in the Philippines. It would then switch to Java/Sumatra and finally Burma (see Figure 5A-1).

CONDUCT OF THE CAMPAIGN

6. The theatre level campaign design called for the Japanese to seize the initiative immediately and pursue **synchronized** joint operations at high **tempo** until the enemy was defeated. Deep operations at Pearl Harbour intended to **dislocate** the US Pacific Fleet were effective in neutralizing this force for the duration of the campaign. This was conducted with simultaneous operations aimed at the theatre level decisive points in Malaya and the Philippines.

7. The operations were inherently joint and all operations called for establishing air superiority as a prelude to amphibious landings and land operations. Initial objectives would invariably be enemy airfields in order to expand the area of influence.

8. The tempo of operations was sustained as initial successes were exploited by shifting resources, first air and then land forces. For example, the operations in Java/Sumatra, aimed at securing the strategic oil fields, were accelerated by one month. In this case air resources from the Malaya area of operations and land forces from the Hong Kong operation and troops fresh from the fall of Manila were shifted to support the new main effort. In a similar vein, ground troops from Singapore were shifted to the Burma area of operations. The control of the seas and the flexibility of the planning allowed the commanders to quickly shift resources as required to meet the higher level intent.

9. Concurrent with the land operations, the Japanese used a combination of air and naval power to destroy allied naval power. Other minor operations were also conducted by the South Seas Detachment (a joint task force reporting directly to the IGHQ) in order to seize operational objectives (e.g. Dutch Timor, Bismarck Islands, etc.,) not directly related to the centre of gravity.



Figure 5A-1: Japanese Southern Theatre of Operations

CONCLUDING THE CAMPAIGN

10. The Japanese advance reached its culminating point in Burma, stretched to the limit of its line of communication and faced with the monsoon season. Farther south, attempts to capture Port Moresby were dashed by the battle of the Coral Sea.

11. Plans had already been made for the establishment of a military administration in the occupied territories and for obtaining the necessary natural resources. Plans began in March 1942 in anticipation of allied counter-attacks and for the establishment of a defensive perimeter of the occupied territories.

ANNEX B THE OPERATIONAL LEVEL -THE MALAYA CAMPAIGN

1. Some of the aspects of the Malaya campaign will be discussed in order to contrast the strategic level versus operational level.

CENTRE OF GRAVITY

2. While the strategic level centre of gravity was physical, i.e. the allied naval forces, the **operational level centre of gravity** was the morale and cohesion of the commonwealth forces in Malaya composed of Indian, Australian and British troops.

3. The Japanese commander, General Yamashita, recognized this early and placed great emphasis on maintaining a high tempo of operations and employing deep operations combined with deception.

CONDUCT

4. The Japanese **pre-empted** the British by attacking through neutral Thailand and seizing the vital high ground dominating the landing areas. Simultaneous **deep** attacks were launched against the port of Singapore in order to **disrupt** the British and erode morale. Air superiority was quickly established and northern airfields were seized as a first priority to extend the **area of influence**. The Japanese achieved a higher relative tempo than the British using bicycles, trucks and a few medium tanks against the mostly foot borne infantry. Although the Japanese were outnumbered in Malaya, they consistently concentrated their forces to outnumber the British at the decisive points

5. At sea, the sinking of the REPULSE and the PRINCE OF WALES by Japanese air power was another severe blow to morale in Singapore. Yamashita also used his control of the sea to launch major deep amphibious operations to **dislocate** the defenders and cause panic. However his ability as a commander was demonstrated during the attack on Singapore.

6. Stretched to the limit of his line of communication, running low on ammunition, and with subordinate commanders advising an operational pause, Yamashita was in trouble outside the walls of Singapore. He had released his

reserve division because he did not have sufficient logistics to support them. The deception plan became his key weapon.

DECEPTION OPERATIONS

7. The Japanese operational security was very effective. With Japanese control of the skies, the British had no indication of the size of the enemy force, or their logistics problems. The British believed that they were facing a force of over 100,000 well supplied troops rather than the actual strength of 30,000 troops. During the final attack on Singapore, the Japanese commander fired off the bulk of his remaining artillery ammunition to give the impression that he had plenty of supplies. The violent attack secured a lodgement and desertion, disorganization, chaos and fear were rampant in Singapore. Yamashita employed his joint resources to ensure that Singapore was isolated and could not be reinforced. As well, psychological operations were employed in the form of leaflets dropped into the city calling for surrender. On 15 February 1942 a force of approximately 100,000 troops in the "fortress" city surrendered to the Japanese.

8. Yamashita described the situation in his own words :

"My attack on Singapore was a bluff - a bluff that worked. I had 30,000 men and was outnumbered more than three to one. I knew if I had to fight long for Singapore I would be beaten. That is why the surrender had to be at once. I was very frightened all the time that the British would discover our numerical weakness and lack of supplies and force me into disastrous street fighting."

SUMMARY

9. This campaign illustrates how a force that maintains the initiative by using a high tempo of operations, and synchronization of joint assets can attack a larger force that had terrain knowledge and time to prepare defenses. It also illustrates the importance of information operations. The physical actions were important, but more important was the effect on the morale and cohesion of the force. This, combined with the loss of the British naval assets shattered the morale and took away the sense of purpose for soldiers defending a port that had no navy.

Annex B to Chapter 5

ANNEX C THE DEFENCE OF UPPER CANADA IN 1812

THE STRATEGIC ENVIRONMENT

1. The American strategic aim in the summer of 1812 was to invade the Canadas, take British land, and then exchange it at the bargaining table for trade concessions and freedom of the seas. United States forces threatened to invade Lower Canada, striking at the main fortress of Québec and the chief city, Montréal.

2. The British strategic objective was to maintain the status quo. Failing that, they would fall back and hold the city of Québec until reinforcements arrived from Great Britain.

3. The provinces of Canada were vulnerable to the United States in three places: the Detroit River, the Niagara River, and the border formed by the St Lawrence River and the long island border between Lower Canada and the State of Vermont. The only remaining narrow crossing between the United States and the Canadas was Michilimackinac, on the St Mary's River between Lake Huron and Lake Superior.

THE CAMPAIGN IN UPPER CANADA

4. American forces could only cross the Great Lakes by boat, and the Provincial Marine vessels on the lakes prevented that. Therefore the United States could threaten Upper Canada in only two places: the Detroit River and the Niagara River. Brock knew that the Americans were preparing to attack both.

5. The initial plan for the defence of the Canadas was to abandon these two lines to the Americans, and fall back on Montréal and Québec. Major-General Sir Isaac Brock, Administrator and Commander in Upper Canada, however, felt that it was possible to defend Upper Canada as well, and convinced Lieutenant-General Prevost, the theatre commander. Prevost gave Brock some regular forces and permitted him to raise the militia. However, Brock knew that he did not have enough troops to defend the entire long border with the United States, and that dividing his forces between the Detroit and the Niagara frontiers would fatally weaken both.

Annex C to Chapter 5

6. There was an additional factor: the Natives. A confederacy of the Shawnee, Miami, Delaware and Potawatomi nations under Tecumseh was prepared to resist American expansion, but had become convinced that the British were not reliable. To bring the Shawnee confederacy to the defence of Upper Canada, Brock needed to prove to the Indians that the British Crown was a credible ally.

MICHILIMACKINAC

7. As soon as word came of the American declaration of war, General Brock, from his headquarters in York (now Toronto), issued orders to the commander of the British trading station across the border from Fort Michilimackinac. Due to the remoteness of the fort, Brock gave the commander great freedom of action, stating simply that he was to use "the most prompt and effectual measures" to take the fort.

8. The commander seized the initiative and with a mixed force of regular soldiers, Canadian employees of the North West Company, and Natives of several tribes took the island fort, establishing British credibility. This **pre-emption** had immediate psychological results: the Wyandot tribe defected to the British; Brigadier-General William Hull, a politician newly appointed to general rank, abandoned his isolated base at Fort Dearborn, the site of modern Chicago; and Natives, their alliance with the British renewed, destroyed the withdrawing Fort Dearborn garrison.

MANOEUVRE TO DETROIT

9. Only days before the American surrender at Michilimackinac, Brigadier Hull had crossed the Detroit River to the town of Sandwich, and proclaimed himself an emancipator. Some Upper Canadians defected to the American side, some reported to the British fort at Amherstburg, but most, including the natives of the Six Nations, stayed home altogether.

10. By crossing the river, Hull threatened more than the cohesion of the Native alliance, his force could also move eastward by land to join up with other forces threatening Québec. Fortunately the British had captured Hull's orders. Brock, however, also knew that he was vulnerable near Niagara, that a large part of his militia was away bringing in the harvest, and that he could not send many troops to hold a line against Hull's 400 US regulars and 800 Ohio volunteers.

11. Instead, Brock took 50 regulars, 250 militia and a 6-pounder gun, and moved to attack Detroit using his superior mobility on the Great Lakes. While Brock moved westward, raiding parties of British regulars and natives led by Tecumseh, infiltrated across Lake Erie in vessels of the Provincial Marine, and conducted deep operations to disrupt Hull's lines of communication. When Hull heard that Brock was coming, the "liberator of Upper Canada" crossed back to Detroit: Brock's manoeuvre westward caused Hull's larger force to give ground without a fight.

THE SURRENDER OF DETROIT

12. Shortly after arriving at Amherstburg, Brock sent Brigadier Hull a carefully worded note:

It is far from my intention to join in a war of extermination, but you must be aware, that the numerous body of Indians who have attached themselves to my troops, will be beyond controul(sic) the moment the contest commences.

13. Even as Hull refused to surrender, Brock's guns were starting to fire on Detroit. That night, Tecumseh's natives infiltrated to the American side of the river. To Hull and his militia the threat of aboriginal attack was very real and very frightening. In a joint operation the next morning, Brock moved his force across under the guns of two Provincial Marine vessels. Brock used deception to make his force seem more formidable: he dressed his militia in spare red tunics to make them look like British regulars, and to make their line look longer he formed his troops with extra distance between sections.

Annex C to Chapter 5



Figure 5C-1: The Defence of Upper Canada - 1812

14. These actions, combined with the psychological effect of the appearance of natives began to create a rapidly deteriorating situation in the mind of the Americans. Then an artillery round fired from Sandwich struck the American officers' mess, killing four. Hull surrendered not only the garrison in Detroit, a large detachment of Ohio volunteers who were away escorting a supply train, but also the brig USS *Adams*. Soon after, Natives overran the American garrison at Fort Wayne in the Indiana Territory, the last American fort in the West.

SUMMARY

15. Brock had conducted a defensive campaign in Upper Canada by going on the tactical offence. Rather than trying to hold a line against the invasion force of Brigadier Hull, Brock moved quickly to attack American soil: first at Michilimackinac, then along Hull's lines of communication, and finally at Detroit. Brock used only a small number of troops to make safe his western frontier and maintained his cohesion by cementing the alliance with Tecumseh's confederacy. By clever use of manoeuvre, synchronized with psychological warfare, joint operations, and selective firepower, he had completely eliminated the American threat in the far west for the rest of the campaign season. After this campaign, Brock immediately redeployed to the Niagara frontier using his

Annex C to Chapter 5

superior mobility on the lakes. Brock was then free to defend the Niagara Frontier, where he was killed in action later that year during the Battle of Queenston Heights.

PART III SPECIFIC OPERATIONS

CHAPTER 6 COMBINED OPERATIONS

The successful general and senior combat officer is an experienced commander and staff officer who understands the peculiarities, complexities and vagaries of joint and combined operations at his own and at one or two levels above his level of command. He is also capable of acting as a national commander in a foreign theatre; and can represent Canadian military and other interests in multinational and other environments. Adequate training, development and experience must be provided to those whose task it is to perform these combat command and staff functions.

Lieutenant-General Richard Evraire Canadian Military Representative - NATO, 1990

SECTION 1 GENERAL

1. Outside Canada, the Canadian army will almost exclusively be involved in combined operations.¹¹ In most cases, Canadian commitments will be in the form of separate land, sea or air forces, each in turn coming under command of allied land, sea and air forces. Such arrangements existed in the First and Second World Wars, the Korean conflict, during our cold war NATO commitment, and in the Gulf War. However, the Canadian Forces may also operate as an independent joint force within a multinational chain of command with a specific area of operations such as in Somalia, during 1992-3. Either of these options may occur in the future and this doctrine accommodates both.

¹¹ Current NATO terminology uses the term "combined", however in this chapter it is used interchangeably with "multinational."
ALLIANCES AND COALITIONS

2. Combined operations involve the military forces of two or more nations acting together for a common purpose. If the relationship is longstanding and formalized by mutual political, diplomatic, and military agreements, it is referred to as an **alliance**. Alliances afford the participant nations the time to establish formal, standard agreements for broad, long-term objectives. Alliance nations strive to field compatible military systems and doctrine, develop common structures, procedures and contingency plans to meet potential threats in a fully integrated manner.

3. If the relationship is short term, ad hoc, and less formal, it is referred to as a **coalition**. Nations usually form coalitions for focused, short-term purposes. Occasionally, coalitions mature into more formal alliance relationships.

4. Combined operations occur both in war and in operations other than war. They demonstrate the advantage of successful multinational operations over the unilateral efforts of a single nation. Coalitions increase the size of the overall force, share the costs of conducting operations among the nations, and enhance the legitimacy of the strategic aims.

SECTION 2 CANADA IN COMBINED OPERATIONS

5. Throughout its history, Canada has been a participant in multinational alliances and coalitions ranging from imperial defence arrangements and alliances to United Nations missions designed to conclude, prevent or monitor international conflicts. However, multilateral security cooperation is not merely a Canadian tradition; it is the expression of Canadian values in the international sphere.

6. In these large alliances and coalitions, as demonstrated in World Wars I, and II, Korea and the Cold War, Canada has not exerted a major influence on combined political or military strategy. However, Canada's status as a middle power, and our global foreign policy has placed the country in a position to work behind the scenes to influence the implementation of that strategy. The importance of the Canadian contribution has frequently not been the quantity of combat power brought to the alliance or coalition, but the international prestige of Canada and the ability to build and sustain consensus and unity in multinational operations.

HISTORICAL PERSPECTIVE

During the operations in North-West Europe, 1944-1945, the First Canadian Army served under 21st Army Group, which was part of the Allied Expeditionary Force. At various times during that period, units and formations from the United Kingdom, Poland, the United States, Belgium, Czechoslovakia, and the Netherlands served as part of the First Canadian Army. It reached its zenith in February 1945, during Operation VERITABLE, when its total strength reached 470,000, although only one quarter of these were Canadian troops.

7. The strong desire for Canada to be a participant in international affairs is contrasted by a shortage of resources, and a consistent desire to resist domination by our allies and maintain Canadian independence in the international forum.

8. From the military perspective, Canadians are particularly suited for combined operations. Canadian soldiers come from a country where different languages, races and nationalities form a national mosaic. They approach problems with an open attitude and a spirit of compromise aimed at finding innovative solutions to problems. These attributes combined with excellent training and fighting abilities enable the Canadian army to carry out a variety of tasks in multinational operations.

SECTION 3 UNITY OF EFFORT

9. Successful combined operations require unity of effort. It is unlikely that all the nations in the multinational force will share exactly the same strategic goals. To complicate this, the military contingents participating in a multinational operation, although under tactical or operational control of the combined force commander, are ultimately responsible to their own national chain of command.

10. In this environment, friction will occur, detracting from unity of effort. To diminish this, the member nations must agree to mutually attainable military objectives, in particular those regarding resolution or termination of the conflict.

CONSENSUS AND COHESION IN COMBINED OPERATIONS

11. Unity of effort in multinational operations is built on consensus. This unity requires a clear recognition and understanding of other nations'

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capabilities and perceptions as well as concessions to accommodate them as appropriate. Compromise will inevitably be required if consensus is to be achieved.

12. Nations may reassess their objectives, both political and military, as the conflict progresses. Therefore, strategic and operational commanders must be concerned with maintenance of consensus throughout campaign design, planning, and execution.

13. The cohesion of the combined force may be its centre of gravity and could be targeted by the enemy. Appropriate military and diplomatic efforts may be required to maintain solidarity. During the Persian Gulf War, Iraq launched SCUD attacks into Israel hoping for reprisals that would alienate the Arab members of the coalition and erode cohesion. Aggressive joint and combined military actions, including "SCUD hunting," and deployment of PATRIOT missiles to Israel, combined with multinational diplomatic efforts were successful in retaining the cohesion of the force.

14. The solidarity of the coalition may be a critical vulnerability, but it is also a key to the legitimacy and public support of the coalition's actions. Efforts to maintain the consensus are extremely important, but this should not distort the actions of the combined force commander unnecessarily.

15. If all participating nations understand clearly stated military objectives and have trust and confidence in their leaders, unity of effort can be sustained. Building cohesion and teamwork and establishing trust before, during, and after the battles and campaign is vital to success. Canadian commanders and staffs can greatly assist in maintaining cohesion in multinational operations by acting as a bridge between the dominant and smaller partners. To preserve this special status, it may be necessary to maintain an independence of thought from the lead nation in the combined force.

SECTION 4 CHALLENGES IN COMBINED OPERATIONS

16. Along with the many benefits of multinational operations cited above, there are several challenges that must be overcome to ensure success.

CULTURAL DIFFERENCES

17. Coalitions may be formed from nations with different cultures, language, moral and ethical values, and incompatible social and economic outlooks. Sources of national pride and cultural sensitivities will vary widely, yet the combined force commander must accommodate them. Differences in work ethic, standards of living, religion, and discipline affect the way nations approach warfighting and operations other than war.

18. Commanders may have to accommodate religious holidays, prayer calls, and other unique cultural traditions that are important to allies. These may be seen as relatively unimportant by some, but unless handled sensitively, they could cause friction, misunderstanding, and cracks in cohesion. As illustrated in the Persian Gulf War, recognition and accommodation of Arab cultural differences were essential in gaining consensus and maintaining cohesion within the coalition.

LANGUAGE

19. Specifying the official coalition language may be a sensitive issue. After a language is selected, all written documents must be translated for tactical execution by units of different nations. This effort may affect planning time and introduces the potential for mistakes or misunderstandings related to differences in terminology. Few linguists have both the technical expertise and depth of understanding to cross both language and doctrinal boundaries and be fully understood. Loss of meaning in translation can be high.

20. With two official languages, Canadian soldiers can provide a useful insight into understanding the problems associated with working with translated documents and of coalition partners operating in their second language.

EQUIPMENT STANDARDIZATION

21. Commanders in multinational operations may face a large technological disparity between units, resulting in a mixture of weapon systems. Difficulties such as incompatible communications and differences in the cross-country mobility of vehicles should be expected. As well, certain coalition units may have some systems similar to that of the enemy, making measures to avoid fratricide vital.

22. These differences can be exploited by placing units with similar capabilities adjacent to, or reinforcing, one another. Unique equipment capabilities can also be used to complement equipment of other nations and present new problems to the enemy. Therefore, commanders must understand the actual equipment capabilities and deficiencies of allied or coalition partners to integrate them successfully into the operation.

23. International standardization efforts in peacetime under the auspices of NATO or other international organizations will also greatly increase interoperability of equipment, ammunition, doctrine and procedures.

INTELLIGENCE

24. National restrictions on intelligence sources and methods may prevent some intelligence from being shared among members of the multinational force. Such intelligence information should be provided as much as possible by sanitizing it to separate it from the sources and methods used to obtain it. Special arrangements should be considered for developing, communicating, and using intelligence information within the multinational force. Whenever possible, these arrangements should be agreed and exercised well before operations commence.

SECTION 5 CANADIAN ASPECTS OF COMBINED CAMPAIGN DESIGN AND PLANNING

25. In combined operations there will be coalition strategic objectives, as well as corresponding Canadian strategic objectives and limitations that may affect the employment of Canadian troops. Canadian commanders must ensure that they understand the Canadian strategic direction in the context of the combined force strategic objectives.

26. The government will state political objectives and assign resources. It is the role of the military to translate these political objectives into operational objectives. Therefore, it is essential for the operational commander to keep the government informed of all pertinent aspects of operations. This will foster trust and mutual understanding between the military and the government in order to ensure adequate support for operations.

27. This is particularly difficult in a country such as Canada where few government leaders and public servants have experience with military affairs.

Commanders must be prepared to explain military capabilities, risks, and limitations in terms that every Canadian can understand so that the appropriate government decisions can be made. Anything less will lead to a poor definition of the strategic objective, a lack of operational focus, and potential military failure.

SECTION 6 COMMAND IN COMBINED OPERATIONS

28. In combined operations, the chain of command must be clear. Invariably, there will be a multinational chain of command and a national chain of command.

29. The combined force commander will discuss specific issues with national commanders on a bilateral basis as part of the planning process and throughout the campaign. In this way, they can avoid competition, detect problems early and, in particular, be made aware of any national concerns or sensitivities. This allows the combined force headquarters to produce plans that will be acceptable well in advance and to coordinate activities to achieve unity of effort.

30. The combined force commander should establish a working rapport with national commanders to overcome many of the difficulties associated with multinational operations. Still, nations will tend to delegate only the minimum necessary authority to the combined force commander to achieve the common objective.

31. In multinational operations, particularly when forces from cooperating nations are of different sizes, the line between the operational and tactical levels will be particularly blurred. Even if a force from a different nation is only of small tactical value, its employment will have a political context. **The Canadian national commander will therefore have operational, in addition to tactical, level considerations.**

COMMAND CONCEPTS IN COMBINED OPERATIONS

32. Command and control may be exercised in combined operations either through a *multinational* headquarters or through that of a *lead nation*.

33. Longstanding alliances such as NATO, where the countries have common procedures, tend to use multinational headquarters, as do international

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organizations such as the UN. Multinational headquarters are most effective when well established command procedures have been developed and practised, and a consistent quality of staff is available.

34. The lead nation concept recognizes that one nation will be assigned the lead role and its command and control system will predominate. This method contributes to unity of effort and can avoid duplication and confusion.

CANADIAN COMMAND AND CONTROL IN COMBINED OPERATIONS

35. The national dimension in combined operations is a key factor. This is particularly true with the realization that the senior national commander of each contingent within a coalition, irrespective of his rank or the size of his nation's military contribution, will effectively be commanding at the operational level, from a national perspective.

36. Without an understanding of the operational level, the Canadian army will be ill prepared to plan or even to cooperate in the planning and conduct of campaigns and major operations. Canada cannot rely on other countries to understand fully the capabilities, limitations and external support requirements of the Canadian formations and units, and employ them properly in multinational operations. This reason alone demands that Canadian commanders understand the higher level concepts articulated by our allies.

37. The key concepts of Canadian command and control in combined operations relate to the roles of a Canadian national commander and a joint force commander, and the transfer of command. (These concepts are discussed in greater detail in B-GG-005-004/AF-000 *Canadian Forces Operations*.

CANADIAN NATIONAL COMMANDER

38. In all cases when elements of the Canadian Forces operate as part of a multinational force, a Canadian national commander will be designated. The Canadian national commander provides the interface between the component commanders and the CDS to ensure national prerogatives are not usurped and that support is effective. The national commander's role will be to provide administrative support to the Canadian contingent of the combined force; to liaise with the combined force headquarters concerning the employment of Canadian Forces; and to monitor the employment of Canadian Forces. The

national commander should also establish liaison with Canadian diplomatic representatives in the theatre of operations.

39. A national headquarters will normally be established in the theatre of operations to provide national command and control and provide the commander with the facilities and resources to accomplish these roles.

40. The Canadian national commander is generally delegated operational command (OPCOM) over Canadian forces participating in a combined operation. The national commander may then transfer operational control (OPCON) of the force to the combined force commander. In certain cases, for example in NATO operations, the national commander may transfer operational command (OPCOM). In either case, the national headquarters will not normally have the capability to plan, organize and conduct major operations, which will generally be the responsibility of the combined headquarters. However, the national headquarters may be required to step-up to one capable of planning and conducting major activities, such as withdrawal operations, if required.

JOINT FORCE COMMANDER

41. Although a Canadian national commander is always designated, a joint force commander is only appointed when an operation is declared "joint." Due to the nature of the Canadian Forces, operations involving elements of more than one environment are not automatically "joint," but must be designated so by the CDS.

42. Once a joint force is established, a separate chain of command is created under the joint force commander who reports directly to the CDS. This chain of command will then be activated at an appropriate time determined at the strategic level and specified in orders through the mechanism of transfer of command. Transfer of command is the formal transfer of a specified degree of authority over forces assigned to an operation, between commanders of supporting commands and the supported commander. The degree of command authority transferred to the joint force commander and the mechanism to effect transfer of command will be determined by the CDS and specified in orders. The transfer of command will occur at a time deemed appropriate by the CDS and the joint force commander.

43. If the Canadian joint force commander is placed in the operational chain of command and assigned a specific task or area of responsibility, the joint force commander will normally retain operational command of all Canadian

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Forces. Otherwise, the joint force commander may transfer operational control, or in certain cases operational command, to the combined force commander for all or part of the operation. The joint force commander may assume the duties of the national commander or a separate national commander may be appointed.

LIAISON IN COMBINED OPERATIONS

44. Robust liaison is essential to developing and maintaining unity of effort in combined operations. Liaison officers are the lubricant that reduces internal friction in the multinational military machine. Effective liaison fosters understanding of missions, concepts, doctrine and procedures, provides for the accurate and timely transfer of vital information and enhances the mutual trust, respect and confidence that are important in maintaining cohesion. Liaison officers will need to be selected with care and will often require specialized training. If they do not speak the language of the force they are attached to, they should be accompanied by a competent interpreter.

SECTION 7 CONDUCT OF COMBINED OPERATIONS

45. Nations build coalitions and alliances on mutual trust, understanding, and reliance, which bind the combined force together. Teamwork and mutual respect are essential to the successful conduct of multinational operations. Members of the coalition should work with their partners to exploit the unique capabilities of the various national forces available.

46. Commanders must understand that there should be equity of hardship, risk and reward within the alliance or coalition according to the various forces' capabilities and characteristics. Cohesion and a shared sense of mission can be fostered by frequent face-to-face command and soldier exchanges, assignment of missions that are matched to capabilities, and assured access to common reserves and specialized capabilities such as air support.

47. Rewards are also difficult to distribute equitably. Commanders and staffs should ensure that, when justified, all nations are seen to be successful both internationally and domestically. This is critical to national pride. It is also complex, because equity will be judged subjectively, and influenced by national media. However, although equity is important, it must not be allowed to prejudice the operation as a whole.

48. In multinational campaigns all forces should observe the same policy on the use of force. However, in some cases, nations may retain different rules of engagement, especially if there are non-traditional partners involved. As well, the concept of minimum necessary force may not be universally understood and accepted by all nations. Therefore, Canadian commanders must be aware of any differences and make adjustments as required.

HISTORICAL PERSPECTIVE

The influence of strategic direction on the tactical employment of Canadian troops in combined operations is illustrated by the situation facing Lieutenant-Colonel J.R. Stone, Commanding Officer of 2 PPCLI, the first Canadian unit to arrive in Korea in late 1950.

The Vice-Chief of the General Staff, quoting a memorandum from the Deputy Minister stated in part that Canada had: "placed the 2nd Battalion under the unified [UN] command and notified that body that the Commanding Officer had been instructed not to engage in operations except in self-defence until training had been completed."

Upon their arrival in Korea, the US Eighth Army Staff instructed Stone, because of the deteriorating tactical situation, to move his battalion immediately to the front as part of 29th British Independent Infantry Brigade Group. Stone was reluctant to turn down his first operational commitment, but was obligated by his strategic direction to ensure that his troops were properly trained. This was a difficult argument to make as US troops, no better trained than the Canadians, were being rushed forward.

As the senior Canadian officer in Korea, Lieutenant-Colonel Stone finally flew to Seoul and after personal discussions with General Walton Walker, Commander Eighth Army, produced his written orders. The Army Commander subsequently granted Stone the necessary training time. Lieutenant-Colonel Stone's moral courage paid off when a few months later, in late April of 1951, 2 PPCLI was awarded a US Presidential Unit Citation for their actions at Kapyong.

49. Special care must also be taken for the execution of information operations in a multinational force. Policies must be consistent throughout the force and the use of psychological operations, deception, and public affairs should take into consideration national sensitivities of the participants.

SECTION 8 SUSTAINMENT IN JOINT AND COMBINED OPERATIONS

Sustainment of combined operations will invariably be shared among 50. the participants. This will allow some nations to avoid bringing a full complement of administration support, and to specialize in their portion of the overall support for the operation. Therefore Canadian troops may be supported by a mix of Canadian units, other nations' administrative and logistics units, civilian contractors, and coalition (or UN) staff agencies. Canadian administration units may also provide support to the forces of other countries. Each situation will be different depending on capabilities and requirements and will be subject to negotiation and agreement during the preparation phase. Consideration may have to be given to unique national requirements such as spare parts or items such as rations that reflect religious or cultural preferences. As well, personnel administration is specific to individual nations and sometimes to individual environments. Therefore, even in combined operations, medical and personnel administration functions should normally be provided by Canada.

51. The combined headquarters staff should provide coordination to ensure that the local infrastructure is not over taxed, and that there is an equitable split of resources such as medical, water, food, construction materials, and real property between national contingents. However, cooperative support arrangements with the host nation or allied nations will not always be available, possible, or even desirable. As a result, these must be viewed as a supplemental increment to the national support capability in a theatre of operations, not as a substitute.

52. Unless other arrangements are made in combined operations, tactical level combat service support is a national responsibility.

SECTION 9 CONCLUDING COMBINED OPERATIONS

53. In combined operations, conditions for conflict termination should be agreed by the alliance or coalition prior to commitment of military forces. The combined force commander will need to be made aware of national sensitivities and the conditions that might result in a component of his force being prematurely withdrawn. In a coalition, the Canadian commander must clearly understand what Canada expects in the way of conflict termination and the conditions for premature withdrawal of Canadian forces. This is especially

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important as it relates to Canadian participation as part of any post-conflict peacekeeping force.

SECTION 10 SUMMARY

54. Operations outside Canada will almost exclusively be multinational. Consistent with the principle of unity of effort, the Canadian commander must always be mindful of the national strategic direction and the national chain of command established.

55. Each multinational operation will have its own unique characteristics depending on the participants. Extra effort will be required to overcome the difficulties of these operations in order to benefit from the diversity of the various contingents.

CHAPTER 7 OPERATIONS OTHER THAN WAR

SECTION 1 GENERAL

1. In preparing for war, the army develops the leadership, organizations, equipment, discipline, and skills that are applicable to a variety of operations other than war. Therefore, doctrine for warfighting is applicable to operations other than war. Though modified to accommodate different situations, the same basic principles apply to all types of conflict.

2. Operations other than war may precede and/or follow war, or occur simultaneously with warfighting in the same theatre. They may also be conducted in conjunction with wartime operations to achieve strategic objectives. They may occur inside Canada as well as anywhere in the world.

3. There will often be an overlap between combat and non-combat operations in operations other than war, as pointed out in Chapter 1. In almost all cases, troops should be trained and equipped to conduct combat operations. This will facilitate the controlled transition from non-combat to combat operations and back as circumstances change.

4. Operations other than war cover a wide spectrum from domestic operations, service assisted and protected evacuations, peace-support operations and humanitarian operations. However, they may be broken down into three categories : those in which Canada is a **participant**, either through choice or necessity; those in which Canada is a **third party** to the conflict; and those where unarmed **assistance** is provided.

5. Operations in the first category include armed conflict, service protected evacuations and some domestic operations. In these operations there is an identifiable opponent. At the tactical level, they may be conducted in much the same way as warfighting, however, the application of force at the operational and strategic levels must be pursued in the context of the overall political settlement desired.

6. The second category includes most peace-support operations, as well as some domestic operations. Success of these missions depends upon the **consent** of the parties involved and the maintenance of **impartiality**.

7. The third category includes unarmed assistance such as disaster relief, medical support, mine clearance supervision, humanitarian assistance, service assisted evacuations and peace building operations. This chapter will discuss operational level aspects of operations other than war that are common to all three types.

SECTION 2 THE NATURE OF OPERATIONS OTHER THAN WAR

8. In war, political and diplomatic mechanisms are no longer deemed to be effective and military efforts are seen as the primary method of terminating the conflict in a satisfactory manner. The full resources of nations may be directed towards the conflict and the level of commitment could, in theory, reach its maximum. In war, the desired end-state is usually achieved by coercion using military force.

9. In conflict other than war, the political and diplomatic means are still available and are therefore dominant over the military means to de-escalate and resolve the conflict. All of the instruments of national and international power need to be coordinated to bring about the desired end to the conflict. These may include the efforts of political, military, economic, and diplomatic organizations, as well as civilian and non-governmental agencies. Military force may only be threatened and even if it is used, its application will be tightly constrained. The military participation in the resolution or termination process is therefore only one component of the overall campaign.

10. The aim in operations other than war is normally to seek **de-escalation** by controlling and preventing physical violence, and creating the secure environment that will permit others to pursue long term diplomatic and political solutions that will be acceptable to the belligerent communities. **In conflicts other than war, therefore, the desired end-state is normally achieved through negotiation.**

11. Operations other than war often develop quickly, and may suffer from vague or incomplete political direction. They are conducted in the context of a maze of non-governmental organizations, supranational, international and national agencies, as well as national and international media. They will normally involve the commitment of military, police and civilian personnel undertaking a wide range of diplomatic, security, civil affairs and humanitarian activities. These operations are often the result of long-term tensions and irrreconcilable differences between groups. Therefore, they do not lend themselves to short term solutions or "quick-fixes."

12. When conducted outside Canada, operations other than war will invariably be combined and will take place under the same conditions outlined in Chapter 6. This will include the use of ad hoc arrangements such as multinational headquarters, sustainment and other functions.

13. The remainder of this chapter builds on the basic concept that while the end-state in war is achieved through coercion, in operations other than war the end-state is normally achieved through negotiation. There are, of course, exceptions to this general rule; **nevertheless, this distinction forms the basis of Canadian army doctrine presented here**.

SUCCESS IN OPERATIONS OTHER THAN WAR

14. Success in operations other than war will be determined more by political factors than military considerations. It will be measured in terms of the degree to which military actions contribute to the achievement of the strategic end-state. The strategic end-state will rarely be a true victory in the military sense. Rather, it will be the achievement of the conditions for other political, diplomatic or social/humanitarian actions to take place to resolve the conflict.

15. Operations other than war are designed to prevent conflict, restore peace by de-escalating or terminating conflict before escalation to war, and to help in the rebuilding of peace after conflict or war. Consistent with the Canadian approach to operations, physical actions should not be ruled out. However, the preferred method of achieving success will be by attacking or, in certain cases, reinforcing the physical and moral cohesion of the participants and the links that bind them to their political leadership, and more importantly to their base of public support.

16. Physical attrition measures and seizure of terrain are not a useful gauge of success. Instead, psychological and political factors, such as reduced tension, increased stability, and shifting loyalties are the correct measures. Still, the belligerants forces may use a strategy of attrition warfare, especially if public support is vulnerable to high casualties among friendly forces.



Figure 7-1: Cohesion in Operations other than War

17. Success in operations other than war requires a wider perspective of the concept of cohesion. The cohesion that exists between the people, the political leadership, and the armed forces in operations other than war can be visualized using the "trinity" illustrated in Figure 7-1. This figure also illustrates the potential psychological and political effects of military operations.

18. If friendly military operations cause divisions between the people and the opponent's political leadership through a loss of will; if the opposing military loses the will to fight through tactical defeats or loss of popular support; and if the leadership reduces its aims in the conflict, then we are enjoying relative success in attacking cohesion. On the other hand if friendly actions alienate the population, strengthen their support of the belligerent armed forces and encourage the opposition leadership not to deviate from their aims, our military actions, in spite of local tactical successes, are a failure at the operational and strategic levels. 19. Paradoxically, in some operations other than war the aim may be to *reinforce* rather than *attack* the cohesion of the participants. This may occur when political agreement has been reached, but military and public support of the government is fragile. This may include such activities as supervision of elections and training and support of local military and police forces. Reinforcing cohesion will promote civilian control of the military forces, promote public support of the agreements, and help to identify and isolate rogue military factions.

20. An asymmetry may exist between friendly and adversary forces concerning costs and benefits of the conflict. The costs of the military effort are measured in physical terms : resources expended, lives lost, etc. On the other hand, the benefits are measured in moral terms : changes in loyalty, a lessening of tensions, or the imposition of our will on the adversary forces. When the belligerents are fighting for their survival, or in their own country, they can often incur relatively high losses while still retaining their cohesion and will to fight. However, protracted operations combined with heavy losses and little or no national interest may erode the political will and public support of friendly forces.

SECTION 3 PRINCIPLES OF OPERATIONS OTHER THAN WAR

21. Conflict other than war is normally not perceived by the public as a struggle for survival. Therefore, the prosecution of the conflict does not automatically take priority over all other national goals. Military actions may be seen as discretionary and as only one of a variety of methods of conflict resolution. Therefore military actions must be consistent with the value of the political objective and hence the level of public support for action. This is why **operations other than war will be characterized by legitimacy, credibility, the minimum use of force and maintenance of transparency.** The principles of war outlined in Chapter 1 apply equally well, with some adjustment, to operations other than war. Therefore, the principles outlined below should be applied in conjunction with the principles of war.

LEGITIMACY

22. Legitimacy is the most important asset of a force in operations other than war. Legitimacy derives from the perception that the mission of the force, as well as its execution, is just and represents the will of a recognized national or international authority rather than some partial interest. Subsequent diplomatic

and political efforts to resolve the conflict can be seriously compromised if the military force lacks legitimacy.

23. Legitimacy originates from the strategic directive or mandate of the force, but can only be sustained if operations are conducted with the scrupulous regard for international norms on the ethical use of military force and regard for humanitarian principles. It is essential that military forces act, and are seen to act, within the guidelines of the military ethos of duty, integrity, discipline and honour in addition to domestic, national, international and military law. The perceived failure to do so could strip the force of its legitimacy, authority and, ultimately, its operational effectiveness.

24. Inappropriate, unethical or unprofessional conduct off duty or the slightest evidence of corrupt practices at any level will damage the overall legitimacy of the force. The highest standards of conduct and integrity must be observed by all personnel. Commanders must set the ethical tone of the force by their personal example, and be prepared to take severe disciplinary action against those who violate such standards.

25. The conduct of information operations, including public affairs, and military civic action programmes can enhance both the domestic and international perceptions of the legitimacy of an operation. Legitimacy may also be strengthened by the international composition of the force such that it contains elements from countries that are geopolitically balanced in terms of regional or political affiliation. Once established, legitimacy will also encourage the wider participation of the international community and non-governmental agencies. Legitimacy also reinforces the morale and cohesion of the force, reinforces national will and helps to solidify public support.

CREDIBILITY

26. In the conduct of the campaign in operations other than war, the one overriding characteristic that is applicable at every level from a rifleman on observation post duty, to the police officer, to the force commander, to the force as a collective whole is that of **credibility**. Credibility is built on a foundation of *legitimacy*. If the individual, unit or the force itself lacks credibility in the eyes of any of the parties involved, then it will have great difficulty in achieving whatever mission has been assigned to it.

27. The more credible the military option, the less likely that it will be tested. Credibility is based on the demonstrated capability to use military force,

Operations other than War

combined with operations conducted with restraint, discipline, firmness and consistency, and always within the guidance of the rule of law. Adversary forces will continuously be "testing" the resolve and ability of the friendly forces. Threats, intimidations and seizures must be met with robust and resolute response.

28. Failing to demonstrate resolve may lead to the impression that the force is weak. It will not be taken seriously by the adversary military forces, the local population or the international community and will fail to inspire confidence. Weak tactics tend to be counterproductive and actually encourage further attempts at coercion. To avoid this situation, we should seek to create an impression of strength, resolution and competence. This can be reinforced by speed and efficiency of deployments, the demonstrated alertness and professionalism of all ranks, by quality briefs to the media, and other means. The more effective the local defence and security of troops using combat skills, the greater the commander's freedom of action.

29. The force should always hold the respect of the adversary forces. If that respect is lost, action should be taken as a matter of priority to restore it. Such respect should be mutual and the members of the force must respect the host country's laws, language, religion, culture and social customs, and show patience and respect for the problems and negotiating positions of the adversaries wherever possible.

MINIMUM USE OF FORCE

30. Decisions regarding the use of force may be the most critical that a commander will take in operations other than war. The use of force in operations other than war tends in the long term to attract a response in kind and its use may heighten tension, polarize opinion, foreclose negotiating opportunities, prejudice credibility of the force, and escalate the overall level of violence. Collateral damage may also set back any developing civil-military cooperation efforts, and adversely affect the overall attitude of the indigenous population. Therefore, the use of force should be a last resort used only when other means of persuasion are exhausted. Ideally, the aim should be to achieve the strategic objective without any use of force.

31. Consistent with this principle, commanders should develop a range of options, appropriate to the specific operations and short of the actual use of force, for dealing with threats. This may include, for example, negotiation; raising a matter to a higher political level; employment of a variety of defensive

actions; control measures, such as planned or improvised road blocks, cordons, and checkpoints; warnings; use of non-lethal force such as riot control agents or batons; and demonstrations or shows of force that act as a deterrent. The media can also be used to help expose the actions of the belligerents to international scrutiny and encourage them to use restraint. Commanders should always seek to de-escalate and not inflame an incident or crisis whenever possible.

32. However, the principle of minimum use of force does not preclude the disciplined and controlled application of appropriate force when required. There must never be hesitation to use sufficient force, within the framework of self-defence and rules of engagement. The disciplined use of force, when justified and commensurate with the provocation, actually contributes to our credibility and acts as a deterrent against further provocations. It should also be precise to minimize friendly and noncombatant casualties and collateral damage.

HISTORICAL PERSPECTIVE

The conduct of military operations during the "Oka crisis" of 1990 clearly illustrates the application of the principles of operations other than war.

The legitimacy of the military intervention was firmly based upon the fact that it was in response to a request by the Government of Québec and supported by eight out of ten Québecois. This was repeatedly emphasized in all dealings with the Mohawks, the public, and the media. The operation was conducted in a professional manner and resolute actions combined with a pro-active public affairs campaign served to build the credibility of the military while decreasing the credibility of the Warriors as spokesmen of the Mohawks nation. The credibility was reinforced by adherence to the principle of minimum use of force in the control of military forces.

The use of transparency served not only to reinforce the credibility of the force, but also reduced the risk of escalation of force. This policy was stated at the strategic level by the CDS, General DeChastelain ("In accordance with my commitment to ensure transparency in the operations of the Armed Forces, we shall continue to announce our intentions.") and implemented at the tactical level by Brigadier-General Roy. ("The approach to our public affairs strategy will be pro-active in the sense that any information concerning the Army's activities that does not risk putting the security of our operations in danger will be announced to the public by means of the media.")

TRANSPARENCY

33. It is important that the force's actions should not be misinterpreted by the parties to the conflict, government and non-government agencies or the national, international or local public. Such misunderstandings may prove dangerous in times of tension. At all times, the force's activities should be manifestly "above board" and not be vulnerable to accusations of pursuing an illicit hidden agenda. This may require the establishment of liaison with all interested parties, including belligerents, and close contact with the media.

34. Consistent with the prevailing requirements for operations security, the parties to a conflict in operations other than war should be made as fully aware as possible of the motive, mission and intentions of the force. Failure to communicate this will foster suspicion and may prevent the development of confidence and trust, thus prejudicing prospects for future conciliation, cooperation and ultimate resolution of the conflict. There is, however, a risk to transparency because the adversaries may have forewarning of our intentions, and may be able to predict our actions. It may also preclude the use of some survivability measures such as camouflage, concealment and deception.

35. Transparency also applies to the work of the media. Restrictions on the media may not be desirable or even possible in many cases. Open and independent reporting should be the norm, and unrestricted access should be allowed to accredited media whenever possible. Warning of dangers specific to certain areas should be given but the existence of dangerous situations should not necessarily preclude media access.

CONSENT

36. The promotion of cooperation and consent which is a prerequisite in most operations other than war but is essential in all peace support operations. In some instance, local consent may be lost to achieve an operational objective. However, a general loss of consent will normally lead to escalation and force either the withdrawal of the force or the transformation to a classical military conflict where Canada and its allies become party to the conflict. This will lead to operations conducted in the same fashion as warfighting at the tactical level, but constrained at the operational and startegic level by the need to achieve the desired political settlement.

SECTION 4 COMMAND IN OPERATIONS OTHER THAN WAR

37. The application of command in operations other than war rests on common principles for all types of conflict. However, a modified approach, and a shift of emphasis, may be required. Operations in this environment can present a special leadership challenge since the activities of relatively small units can have operational and even strategic impact. Commanders must ensure that their troops understand that a tactically successful operation can also be strategically counterproductive because of the way in which it is executed and how the adversaries or the public perceive its execution.

38. Therefore, there is a greater requirement for commanders, at all levels to maintain a broad perspective and keep the larger political and psychological objectives in mind. Canadian doctrine also calls for commanders who can grasp the diverse perceptions, needs and concerns of the other groups involved in the conflict. In other words those who are capable of operating beyond traditional military operations. It is important to comprehend the total situation and realize where there is flexibility for negotiation and what the non-negotiable elements are.

39. The ambiguity of operations other than war enhances the importance of the concepts of vision and commander's intent. When formulating their vision, commanders should include clear political, psychological, as well as military, objectives and considerations. A clear statement of the commander's intent, supported by a broad information effort, will provide a focus for unity of effort among all agencies involved and ensure that all elements of the force act in unison.

HISTORICAL PERSPECTIVE

An example of an operational level commander's intent in operations other than war is from General Sir Michael Rose's Campaign Plan for BHC [Bosnia-Herzegovina Command] :

BHC Comd intends to gain the initiative in the present, largely chaotic, situation by taking all necessary steps within the powers authorized by the UN mandates to work steadily towards peace. Information policy will play a major role in these objectives. Within a framework of consent between all parties, the focus will be on developing more cooperative, positive and trusting attitudes by the peoples of BH. In this way progress will be made towards achieving the desired end-state of peace-security and creating the conditions for economic renewal for all the peoples of BH.

Operations other than War

40. Decentralization is used to encourage the low level initiative needed to exploit operational or strategic breakthroughs. At the same time, the operational level commander must be sensitive to unforeseen tactical successes or inspired initiative and be prepared to reinforce and exploit them as means of progressing towards the desired end-state.

41. In many operations other than war, other agencies will have the lead. Commanders may answer to a civilian chief, such as a UN or government official, or may themselves employ the resources of a civilian agency. In some cases, a civilian organization may be designated as a "lead agency" to provide an informal coordination function. Command arrangements may often be only loosely defined, causing commanders to seek an atmosphere of cooperation rather than command authority to achieve objectives by unity of effort. Military commanders must therefore consider how their actions contribute to initiatives that are also political, economic, and psychological in nature.

42. Command in multinational operations will be influenced by the factors outlined in Chapter 6. Most often, command in domestic operations will be the responsibility of a Land Force Area Commander, supported by his headquarters, and reinforced as required by staff from other environments. The area commander is *responsive* to civil authorities (e.g., the RCMP) but reports to the CDS. Civilian representatives of other government departments, including the RCMP, have no authority to direct military operations or to issue commands or orders to Canadian Forces personnel (they may provide advice or make requests). The chain of command in a domestic operation, therefore, must ensure that armed forces are always acting *in support* of civil authorities, and military forces are always commanded by their military superiors.

LIAISON IN OPERATIONS OTHER THAN WAR

43. Beyond normal liaison with friendly military forces, there is a requirement for coordination with outside agencies, local governments and, in some cases, even adversary forces. Effective liaison is paramount to the success of operations other than war. Due to the sensitivity and importance of their work, liaison officers must have the trust and support of the commander, and be provided with quality interpreters.

44. Regular inter-agency meetings and designation of liaison staff are a good way to improve relations, exchange information, and provide a convenient focus for requests for military assistance from civilian agencies. Effective liaison ensures that misunderstandings are avoided, communications avenues

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remain open, and negotiations can be initiated when required. In this way the intent and actions of friendly and belligerent forces cannot be misinterpreted, and rogue elements can be identified and dealt with.

SECTION 5 CAMPAIGN DESIGN AND PLANNING FOR OPERATIONS OTHER THAN WAR

45. Campaign design is similar for all types of conflicts, however it may need to be adjusted to apply to operations other than war. As a negotiated settlement is the desired strategic end-state, conflict de-escalation will be sought by tying the resolution of individual incidents into a larger campaign plan.

46. The most important aspect of campaign design remains the absolute requirement for focussing activities at the strategic, operational and tactical levels on achieving the strategic objective. Unfortunately, in operations other than war political imperatives are likely to be less well defined, more volatile and of greater direct influence on all aspects of the conflict than in war. In planning campaigns, therefore, military objectives and activities must be defined, refined and subsequently reviewed against shifting political direction as part of mission analysis. The operational level commander must recognize that he will be significantly, and properly, constrained in his freedom of action by social, economic and political imperatives, and may be subject to shifting and inadequate strategic direction. In most cases, the limitations on the use of physical military force will mean that operations will be conducted primarily on the moral plane.

47. Even with vague or incomplete strategic direction, the campaign must be designed to achieve a clearly articulated end-state, in order to give the operational level its planning start point. Any assumptions that are made must be noted and constantly verified. Several contingency options along alternate lines of operation may be required to help provide the necessary flexibility to respond to changes in the strategic aim. As well, competing priorities, external pressures and unforeseen events may lead to uncontrolled and incremental changes in mission or "mission creep. "To avoid this, commanders should be prepared to conduct regular mission analysis and seek clarification of the strategic end-state as required.

48. In operations other than war, the centre of gravity is generally the popular support for the belligerent forces and their political leadership. They depend on popular support for their legitimacy, as well as moral and physical sustainment. Military operations targeting cohesion should be designed to

Operations other than War

produce political and psychological results that influence popular support of the belligerents, isolate their armed forces from their source of moral and physical support and thereby create the conditions for a favourable resolution of the conflict (see Figure 7-1). Military actions should demonstrate that the use of force by belligerents to obtain goals will not be successful and only a negotiated solution is possible.

49. It requires political acumen to identify military operations that affect the cohesion between an opponent's government, people and their armed forces. This political judgement is not automatically a part of a soldier's skills, and therefore measuring the political value of a military success is one of the toughest problems in operations other than war.

50. The centre of gravity for friendly forces will also be related to national popular support and political will. Appropriate measures may have to be taken to preserve the cohesion of the friendly forces' "trinity" and protect it from attack by adversary forces.

BATTLEFIELD FRAMEWORK

51. The concept of a battlefield framework should be used flexibly in operations other than war. Areas of operations may need to be aligned with existing administrative (provincial, county, or municipal) boundaries, with headquarters located in the provincial, county or municipal capitals to simplify relations with local authorities.

52. Regional conflicts are often linked to transnational groups tied by religious, ethnic or cultural bonds. Therefore the area of interest at the operational level may extend well beyond the current theatre and consider the maintenance of regional stability as well.

FUNCTIONAL FRAMEWORK

53. The concept of a functional framework is applicable to operations other than war, however there will be a shift of emphasis towards such functions as civil-military cooperation, interagency cooperation and public information. The concepts of synchronization, tempo and designation of the main effort remain applicable as essential tools to integrate various functions.

INFORMATION OPERATIONS

54. Information operations become very important in operations other than war because of the emphasis on actions on the moral plane. Local and international public support feeds on the credibility of the force and the perceived potential for successful resolution of the conflict. As a result, the force needs a pro-active information plan that allows it to transmit correct information quickly to decision makers, both within the mission, and those outside it. As well, the force must be able to counter false or incorrect stories.

HISTORICAL PERSPECTIVE

Information operations are also an essential aspect of domestic operations where military forces are under intense media scrutiny. An excellent example of a proactive public affairs programme is that conducted during the Oka crisis of 1990.

"The presence of reporters served not only to inform the people but also to influence them to a certain point. In fact, announcing all troop and equipment movements via the press contributed to a reduction of tensions in the field and even went as far as to spark dialogue. Also the omnipresence of cameras encouraged opposing groups to remain calm and not commit themselves to an escalation of violence. When first looking for the support of the people, the Warriors did not know how to effectively exploit the support given them by Canadians at the beginning of hostilities. Their violent and unjustified actions, once broadcast, had the effect of turning opinion against the Mohawks. A public relations plan which included an information campaign definitely aided in the understanding of our role in the crisis."

"In a world where information is of capital importance, the media provides everything. In openly expressing our point of view, the risk of ambiguity was erased."

Brigadier-General J.A. Roy Commander GBMC, 1990

55. The important effect of information in operations other than war is illustrated by the situation of UNAMIR in Rwanda. The commander stated the following :

The UN force had no capability to counter deliberately inflammatory broadcasts from the nominally independent

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<u>Radio Télévision Libre des Mille Collines</u>....These broadcasts were in large measure responsible for the spread of panic and hatred, which in turn convinced large numbers of civilians to take flight to refugee camps in neighbouring countries....

Major-General R.A. Dallaire

56. Unlike warfighting, the information collection process in operations other than war may be restricted by domestic, political, UN or peace supervisory organization criteria. This may include a restriction that information gathering may only use overt methods and rely primarily on such sources as patrols, observation posts, airborne reconnaissance, liaison and contacts with the local population and local and international media. This will increase the importance of using all personnel to collect information during the course of their duties, and they should be debriefed on a regular basis. For example, drivers and other personnel assigned to resupply convoys will see more of the theatre of operations and may have access to some areas that are otherwise restricted to travel and observation. Care must be taken in the collection of information as in some cases it may be required for use in criminal investigations for violations of domestic or international law.

SUSTAINMENT IN OPERATIONS OTHER THAN WAR

57. The operational commander tailors logistics support of these operations based on strategic objectives much as they would in wartime situations. Operations other than war tend to use smaller quantities of combat supplies, such as ammunition and fuel, and have a lower density of troops than in war. However, they also require more unique and specialized support and often unexpected items such as bulk water and material to support military civic action programmes. Therefore, logistics support systems designed for war are capable of supporting operations other than war. The limiting factor becomes the personnel and material resources available in the theatre.

58. In some cases, combat support or combat service support units may be the only troops involved in operations other than war and the logistics operations may well be the main effort. Other typical support tasks in operations other than war involve constructing roads, bridges and other key infrastructure, and providing emergency medical support abroad in support of diplomatic and political initiatives.

SUSTAINMENT IN UNITED NATIONS OPERATIONS

59. Sustainment in UN operations is different from other multinational operations. Forces arriving in a theatre at the start of a mission are expected to be self-sufficient for a period of time. However, the overall responsibility for logistics support in peacekeeping operations rests with the UN. As a result, the Canadian elements operate within the UN logistics system and in accordance with UN procedures. However, when the UN logistics system is inadequate, or if the operational commander requires additional support beyond UN standards, then this becomes a national responsibility. For further details see B-GL-321-005/FP-001, *Peace Support Operations*.

SECTION 6 CONDUCT OF OPERATIONS OTHER THAN WAR

PREPARATION AND DEPLOYMENT

60. Operations other than war should be conducted from a secure base. Security for the force must be provided in order to retain freedom of action and the ability to seize the initiative from the adversary forces.

CONDUCT

61. By the time military forces arrive, the adversary force(s) will likely have the initiative. Therefore, the commander must conduct operations to fix the adversary force and set the conditions to seize the initiative either physically or morally. This can be done, for example, with a massive show of strength and the demonstrated ability to use disciplined force as was done in the FLQ crisis, Oka, Somalia, and in Haiti. This demonstrates the **ability** to use force, however the psychological effect of a demonstration of military power may often negate the **need** to actually use it.

62. As soon as troops are committed, there will be uncertainty in the minds of the adversary forces as to what the military will do, and the adversary forces will go through a period of "testing" the resolve and ability of the friendly forces. The commander should seize the initiative to capitalize on the initial period of uncertainty following the deployment of his troops and take advantage of it before the conflict slides into a static situation, where making progress is much more difficult. At this stage, the credibility of the force is essential to preserve security, provide freedom of action, and set the conditions for offensive action centred on negotiations.

63. In situations where there is an identifiable opponent, the key decision will be how best to terminate or resolve the conflict by attacking the opponent's cohesion. This is achieved through a combination of destruction, pre-emption, dislocation or disruption. The balance between them will be different from that in war and a wider interpretation of cohesion may be required.

64. Efforts targeting cohesion should concentrate not only on the military forces of the adversaries but also on their public support and political leadership, as illustrated in Figure 7-1. Politically and psychologically the results of his operations must convince the opposing leadership that their cause is hopeless, or at least too costly in terms of political dissent, to proceed. Any adversary force must see that they ultimately will be unable to achieve their political objective.

65. To eliminate an adversary's will to fight the commander must look beyond the tactical battles and look at their political strengths and weaknesses. Imposing our will on the other factions is crucial and requires an understanding of politics and societal dynamics. If the opposing commander thinks that he can eventually win, or can gain some advantage, then he will continue to fight.

66. Selective destruction at the tactical level may be appropriate. But in general, political objectives are unlikely to be served by high casualties on either side or to noncombatants and therefore attacking the will and cohesion of the opposition will be more appropriate and practicable approaches to success. The unnecessary or inappropriate use of force may, in fact, jeopardize the desired operational end-state and prejudice longer term post-conflict activities.

FIXING AND STRIKING IN OPERATIONS OTHER THAN WAR

67. The conduct of all such operations will be founded on the dynamic forces of fixing and striking. However, a wider interpretation will need to be placed on these concepts for application to operations other than war. Each meeting, check point encounter, patrol or convoy escort should be considered as a "battle" or "engagement" whose conduct should be guided by the commander's intent.

68. In operations other than war, it may not only be desirable, but unavoidable to concentrate on fixing and striking on the moral plane. In the contest of wills in operations other than war, the psychological initiative must be

retained. This should be built on a firm foundation of legitimacy, which is tied to national or international law. Once the legitimacy of the force is established, further action can be taken.

69. The Canadian approach to conflict de-escalation relies first upon competence with basic **combat skills** and the use of **contact skills** to reduce the number and severity of incidents over time. Combat skills include the ability to conduct manoeuvre, self-defence, reconnaissance, proper reaction to fire, etc. Conversely, contact skills include personal contacts primarily involving investigation, negotiation, mediation, arbitration, conciliation, other confidence building measures and information operations.

70. **Fixing**. Fixing involves denying goals, restricting freedom of action and putting the other party in a reactive frame of mind. By fixing, the commander attempts to create the conditions to seize and maintain the initiative. Indeed, fixing may be the main effort as a prelude to decisive political and diplomatic activity. Fixing actions should not, however, lead to stagnation and a hardening of the status quo, which will make it more difficult to progress towards resolution of the conflict. There will be some use of confidencebuilding measures and negotiating at the tactical level, but the primary purpose of the fixing operations is to create the conditions for higher levels actions that can lead to a negotiated end-state.



Figure 7-1: Fixing and Striking in Operations other than War

71. Militarily the commander must protect the lives and integrity of his forces. This is done by soldiers defending themselves using basic combat skills and fixing the opponent to create the conditions of security so that other elements of the force can operate to de-escalate the conflict.

72. **Striking**. The wider interpretation of "striking" required for operations other than war includes the concept of using negotiations as an offensive measure to gain the initiative and achieve tactical and operational objectives. Once the situation has been stabilized by a "fixing" action, the possibility exists to regain lost ground or achieve new gains in the negotiation process. **Therefore fixing actions using primarily combat skills establish the conditions for striking actions using primarily contact skills.**

73. There may be opportunities when the direct application of physical combat power at the *tactical level* within the guidelines of use of minimum force is appropriate. Often the credible threat of military power, through a massive show of strength, may be equally effective.

74. However, the use of physical destruction at the *operational level* should be used sparingly as the situation could escalate more rapidly and with more severe consequences when higher level forces are engaged. Physical destruction may be used to demonstrate both the ability and willingness to use overwhelming firepower and therefore encourage the participants to negotiate. Force may also be used to establish conditions such that friendly forces can enter negotiations from a position of strength.

75. Where it is neither possible nor appropriate to strike at the other party physically, an alternative response may be to manoeuvre by changing the situation, posing new threats and challenges. Manoeuvre, either psychological or physical, confers initiative, the ability to change and therefore dominate the situation. Manoeuvre is a particular attitude of mind. This attitude seeks to undermine the adversaries' resolve through psychological pressure exerted against a background of patience, restraint, professionalism and impeccable discipline.

HISTORICAL PERSPECTIVE

Canadian troops were deployed as part of a UN mission in the Former Yugoslavia beginning in 1992. As a result of an impasse at the strategic level, on 22 January 1993, Croatian forces had advanced in Sector West to seize control of Kryena Serb occupied areas within Croatian territory. Had there been more warning, diplomatic channels might have been used to pressure Croatia. As it was, political as well as liaison officers were caught off guard. The advance gained control of parts of those areas commonly known as "Pink Zones" in UN Sector South. Along the ZAGREB-BELGRADE highway near the town of NOVSKA, they encountered two companies of 3rd Battalion, Princess Patricia's Canadian Light Infantry occupying dug-in positions with allround defence and heavy weapons covering a narrow avenue of approach. The defensive deployment was coupled with intensive negotiating efforts from the UN battalion commander up to the Special Representative to the Secretary General. During negotiations, every opportunity was taken to stress the preparedness of the positions and the determination of the UN forces to hold them against attack from either side. Ultimately, defensive deployment combined with a major negotiating effort at the operational level were successful and the attack was halted short of incursion into the UN-controlled zone.

76. As operations may be focussed on the moral plane, information operations will be a primary method available to the operational commander to influence adversary forces, and the international and national public.

77. In many cases, a pure military response is inappropriate and the incident must be solved by higher level negotiation. Negotiation and mediation may be used to reconcile opponents, both to one another and friendly forces. In many societies, self-esteem and group honour are of great importance and simple face-saving measures to preserve a party's dignity may serve to relax tension and defuse a crisis. On the other hand, a weak and delayed tactical response is likely to increase the chances of repetition. This must be done with patience, resolve, knowledge of the adversary forces strengths and weaknesses, and be guided by a clear understanding of the commander's intent.

USE OF FORCE GUIDELINES IN OPERATIONS OTHER THAN \mathbf{WAR}^{12}

78. The mechanisms of *self-defence* and *rules of engagement (ROE)* remain valid in operations other than war, although the use of ROEs may be more restrictive and those for domestic operations may be significantly different from those for operations outside Canada. However, military personnel are always entitled to use force in self-defence or in designated circumstances to protect others from death or serious bodily harm.

79. For United Nations operations there is a distinction between missions authorized under Chapter VI of the UN Charter (*Pacific Settlement of Disputes*) and Chapter VII (*Actions with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression*). The fundamental difference between these two chapters and their provisions is the authorization for the use of force. Chapter VI deals primarily with peaceful means of settling disputes but does not preclude the deployment of military forces. Therefore, the use of force under Chapter VI is normally confined to self-defence. Chapter VII provides for additional means (but still within the realm of peace) of achieving compliance, enforcement actions, and the use of force up to and including deadly force to ensure a return to peace and stability. Use of force *in Canadian Forces Operations*.

¹² General guidelines on the use of force were outlined in Chapter 6.

SECTION 7 UNIQUE ASPECTS OF OPERATIONS OTHER THAN WAR

DOMESTIC OPERATIONS

80. Domestic operations are operations to aid in the maintenance of public order and security, emergency relief and the pursuit of national development goals through the provision of armed or unarmed assistance to civil authorities. In domestic operations, the Canadian Forces complement and supplement civil authorities until such time as the civil authorities can resume normal activities.

SERVICE ASSISTED/SERVICE PROTECTED EVACUATIONS

81. There are many areas in the world where Canadian citizens may be in danger from terrorists, dissidents, guerilla forces, or a general breakdown of law and order. In such situations, the Canadian Forces may be called upon to evacuate these citizens. These operations will invariably be joint and most likely combined.

82. A **service-assisted evacuation** operation is conducted when the host country is able to provide and guarantee the security of the operation. The use of military force is limited to the provision of such assets as communications, transportation and medical support. A **service-protected evacuation** operation is necessary when the host country cannot guarantee the security of the operation. In this case, military force is deployed to provide security and protection while conducting the evacuation.

PEACE-SUPPORT OPERATIONS

83. Peace-support operations are multi-functional operations conducted impartially in support of a United Nations/Organization for Security and Cooperation in Europe mandate involving military forces and diplomatic and humanitarian agencies and are designed to achieve a long term political sttlement or other conditions specified in the mandate. They include peacekeeping and peace enforcement as well as conflict prevention, peacemaking, peace building and humanitarian operations.

84. In peace-support operations, Canadian army units and formations do not have an "enemy" as in war. The success of the mission will depend upon

the **consent** of the parties involved and the maintenance of **impartiality** by the peace-support forces.

85. Consent is unlikely to be absolute or permanent. At the operational level, consent derives from formal agreements and its boundaries are fairly clear. At the tactical level, however, consent is subject to many local influences, including the degree of control commanders exercise over local forces, and the credibility and mutual respect generated between intervening forces and the belligerents.

86. In these operations, the impartial status of the force does **not** allow the conduct of operations to be predicated on the identification of an enemy. In Canadian army doctrine, once a force loses its impartiality, it becomes a participant, and in so doing opens itself up for criticism and for physical retaliation.

87. In peace-support operations there is often little peace. Conflict exists and there are belligerents that are pursuing their own campaigns to attack each other's centre of gravity, exploit weaknesses and defeat each other's cohesion in order to achieve their strategic goals. The first requirement of the commander in peace-support operations is to understand the strategic context of the conflict, the goals and operational objectives of each side and the means they intend to use to achieve those objectives. A thorough knowledge of the operational level of conflict is essential to this understanding.

88. Once a full understanding of the existing conflict is achieved, the operational commander can then determine each sides' vulnerabilities and respective centres of gravity, select his operational objectives and proceed to seize the initiative. The challenge will be to translate mandated activities into coherent, lasting and achievable objectives that support progress to a defined political end-state through campaign design.

ARMED CONFLICT

89. The conscious decision to dispense with impartiality and become a party to a conflict differentiate these Armed conflicts from Peace Support Operations. These actions are distinct from wars as they are discretionary in nature and do not strategically threaten our nation.

PEACE ENFORCEMENT

90. Peace enforcement operations are undertaken under Chapter VII of the United Nations Charter. They are coercive in nature and are conducted when the consent of all Parties to a conflict has not been achieved or might be uncertain. They are designed to maintain or re-establish peace or enforce the terms specified in the mandate. Peace enforcement is therefore a conflict termination activity using either direct or indirect intervention. Enforcement may be seen as a vehicle for transition to post-conflict activities, including peace building. This longer term perspective is likely to have a profound influence on the way in which a peace enforcement campaign is planned and executed.

HUMANITARIAN OPERATIONS

91. Military involvement in humanitarian assistance encompasses shortrange programmes aimed at ending or alleviating suffering caused by natural or manmade disasters, including combat. These programmes help reduce human pain, disease, hunger and hardship. Humanitarian assistance supplements or complements the efforts of local civil authorities or other agencies that may have primary responsibility for providing this type of assistance.

92. Humanitarian operations may be conducted as an independent task or in the context of a peace-support operation. Starvation and population dislocation are sometimes used as weapons of war and means of acquiring land. The use of aid convoys and protected areas may reduce the effectiveness of these tactics and push the adversaries to negotiate. Conversely, humanitarian efforts may also encourage retention of the status quo, or even worse, encourage continuation of the conflict indefinitely. Therefore, there is a need for a farreaching strategy for combined peacekeeping/ military humanitarian operations to be integrated with diplomatic efforts.

93. The lack of a clear political objective and the lack of effective coordination between military and aid organizations at the operational level can prevent the humanitarian aid effort from being as effective as it can be, even though lives are being saved. Humanitarian assistance alone will not produce long term solutions. Both the military security and humanitarian efforts should be co-ordinated with political initiatives to reduce the tensions and hostilities that keep refugees and displaced persons away from home. This will permit early resettlement and a return to normal political and economic activity in conjunction with a coherent strategic framework based on peace building

initiatives and revitalization of the local infrastructure. This can be achieved, in part, through interagency cooperation.

SECTION 8 INTERAGENCY COOPERATION

94. Canadian army commanders must be prepared to fight wars and conduct joint and multinational operations other than war while working with a variety of government, non-government, private volunteer and international agencies. This is true not only when the military is the prime strategic option as it is in war but when other agencies are the preferred option and the military provides supporting or protection forces such as in internal security and humanitarian assistance.

95. In situations calling for a military presence, it is essential to co-ordinate military and other efforts through interagency cooperation. Military forces should concentrate on establishing the conditions of security and stability which permit other agencies to function effectively. This may need to be done with the assistance of the local government. Once the secure environment is established, humanitarian assistance and related tasks should be relinquished to civilian agencies suited to the task of providing humanitarian support, economic aid, police services, and political-social development to end the conflict. The military should eventually become less involved in the work of other agencies, and the combined effort will provide legitimacy and leverage to assist in the achievement of military and political objectives.

96. Interagency cooperation must begin with a clear understanding of the desired end-state of the campaign. Military, political and diplomatic cooperation is essential. This is easiest to obtain when the objectives are clear, the leadership of the operation is identified, and the roles of different agencies are well-defined. This implies a clear concept and plan at the operational level.

97. The challenge of interagency cooperation is to achieve sufficient consensus about strategic ends that operational campaigns by one agency do not undermine the efforts of another. In dealing with these agencies, the commander must understand their objectives, resources and limitations, and understand how they can assist or endanger the achievement of his own objectives. Co-ordination of strategic objectives (for example, peaceful resolution of the conflict) should be emphasized in order to foster cooperation, at least, and hopefully consensus and unity of effort. The situation is similar to multinational operations where significant effort may have to be expended in order to gain a consensus. In some cases this may not be possible and the goal

may be simply cooperation and mutual non-interference. In the end the results will be worth the effort.

98. Cooperation with other agencies, ranging from police and local governments to non-government organizations, and private volunteer organizations may yield other valuable benefits to the force. These agencies may be useful sources of local knowledge or cultural expertise for others new to an area. For example, some non-governmental organizations concentrate on emergency aid, but most establish long-term operations in countries with chronic needs. Many agencies are likely to be in the theatre before the arrival of the military force, and are likely to remain after its departure.

SECTION 9 CIMIC IN OPERATIONS OTHER THAN WAR

99. CIMIC is meant to both further Canadian national objectives and to assist military operations. In some cases such as humanitarian or disaster relief operations, CIMIC may be the primary task of the force.

100. There may be confusion and overlap between military involvement in strictly humanitarian assistance to reduce pain and suffering, and military civic action as part of an overall CIMIC program. Humanitarian assistance and military civic action may be conducted simultaneously and some activities may satisfy both objectives, however the operational commander must be aware of the subtle difference when it concerns expenditure of resources allocated for the achievement of operational objectives.

101. For example, during Operation Deliverance in Somalia it was estimated that 30 per cent of the effort was devoted strictly to security tasks and the remaining 70 per cent of the time and resources were devoted directly or indirectly to long-term rehabilitation and nation-building activities related to the reconstruction of infrastructure and institutions, redevelopment and political reconciliation. This was done not only for the satisfaction of helping others, but because it was an essential element of the commander's plan to establish stability and security in the area of Belet Uen.

102. To obtain the cooperation of the civilian population, CIMIC operations may integrate other functions such as public information and psychological operations (PSYOP) under the concept of information operations. PSYOP supports CIMIC through political, military and economic actions planned and conducted to mould the opinions, attitudes and behaviours of foreign groups to support Canadian national objectives. The J3/G3 division supervises PSYOP

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but the J5/G5 division coordinates those PSYOP directed at the civilian population. An example of the successful use of PSYOP combined with CIMIC during Operation Deliverance in Somalia is as follows :

Two days prior to the securing of Belet Uen, 80,000 leaflets were dropped on the town informing the local residents of our impending arrival, of the need for them to keep all weapons indoors and of the requirement for the technicals to leave town. The drop, conducted by a US Air Force aircraft, was highly successful and, combined with [a] meeting with the elders the next day, made for an uneventful arrival in Belet Uen on 28 December.

SECTION 10 SUMMARY

103. Doctrine for war is applicable to operations other than war. However, the basis of Canadian army doctrine is that, as opposed to warfighting, in operations other than war the ultimate end-state is normally achieved through negotiation. The general concepts of campaign planning are accepted as valid in operations other than war. As the emphasis in doctrine shifts toward deescalation as a means to reach a negotiated settlement, soldiers at all levels must learn to make a wider interpretation of some common doctrinal concepts. Operations other than war are divided into three categories, however, there are several aspects common to them all.

104. The conduct of this campaign of de-escalation is based upon a foundation of legitimacy and conducted to preserve credibility, consistent with the principles of minimum use of force and transparency. The concepts of fixing and striking are used to establish conditions to negotiate from a position of strength. The use of strictly controlled combat skills must be supplemented by contact skills focussing on negotiations and persuasion to achieve operational objectives.

SUGGESTED READING

The list below is designed to call attention to a few books dealing with various subjects and campaigns which any Canadian student of the war can benefit from. The list is far from exhaustive and there are many good books not included in it.

GENERAL WORKS ON MILITARY HISTORY AND STRATEGY

- Barnett, Corelli, *The Swordbearers : Studies in Supreme Command in the First World War* (London, 1963); *The Desert Generals* (London, 1960).
- Blumenson, Martin and Stokesbury, James L., *Masters of the Art of Command* (New York, 1975).
- Chandler, David G. *The Campaigns of Napoleon*. New York : The Macmillan Co., 1966; *The Art of Warfare in the Age of Marlborough* (London, 1976).
- Churchill, Winston S., *The Second World War*, 6 vols (Boston, 1948-53).
- Clausewitz, Carl Von. *On War*. Michael Howard and Peter Paret eds and trans, (Princeton, 1984).
- Du Picq, Ardant, Battle Studies, (Harrisburg, PA, 1947).
- Dupuy, Trevor N., A Genius for War (Virginia, 1984).
- Eisenhower, Dwight D., Crusade in Europe(New York, 1979).
- Erickson, John, *The Soviet High Command : A Military-Political History* (New York, 1962); *The Road to Stalingrad* (New York, 1975); *The Road to Berlin* (New York, 1983).
- Fuller, J.F.C. The Conduct of War: 1789-1961 (New York, 1992); The Decisive Battles of the Western World and their Influence upon History (London, 3 vols, 1954-56); The Generalship of Alexander the Great (New York, 1968); Grant and Lee: A Study in Personality and Generalship (Bloomington, In, 1982).

- Gabriel, Richard, and Paul Savage, *Crisis in Command*(New York; Hill and Wang, 1978)
- Garthoff, Raymond, Soviet Military Doctrine (Santa Monica, Calif., 1954).
- Great Britain. War Office. Field Service Regulations. Vol. 3. Operations -Higher Formations. (HMSO, 1935).
- Guderian, Heinz, Panzer Leader(London, 1952).
- Hackett, John, Winthrop, The Profession of Arms (London, 1963).
- Hamilton, Nigel. *Monty, Vol II :Master of the Battlefield 1942-1944.* London : Coronet Books, 1985.
- Hattaway, Herman and Archer Jones, *How the North Won : A Military History* of the Civil War (Chicago, 1983).
- Herzog, Chaim, The War of Atonement : October 1973 (Boston, 1975).
- Howard, Michael. *War in European History*. Oxford : Oxford Univ Press, 1992; *The Theory and Practice of War* (London, 1965).
- Janowitz, Morris, *The Professional Soldier : A Social and Political Portrait* (Glencoe, Ill, 1960).
- Jomini, Baron de, *Précis de l'art de la guerre* (Paris, 1838);Published in English as *The Art of War*(New York, 1864).
- Keegan, John, *The Face of Battle* (New York, 1976); *The Mask of Command* (London, 1987).
- Leonhard, Robert R., The Art of Manoeuvre (Novato, 1991).
- Liddell Hart, B.H., *Decisive Wars of History* (Boston, 1929); *Strategy* (New York, 1967).
- Lind, William S., Manoeuvre Warfare Handbook (Boulder, 1985).
- Luvaas, Jay, trans, and ed, *Frederick the Great on the Art of War* (New York, 1966).
- Machiavelli, Niccolo, The Art of War, 2 vols, (London, 1905).

B-GL-300-001/FP-000

- Conduct of Land Operations
- Manstein Field-Marshal Erich Von. *Lost Victories*. (London, 1958)(edited and translated by Anthony G. Powell).
- Marshall-Cornwall, James, Napoleon as Military Commander (London, 1967).
- Montgomery, Field Marshal, *The Memoirs of Field-Marshal Montgomery* (New York, 1958).
- Newell, Clayton R., The Framework of Operational Warfare (Padstow, 1991).
- Patton, George S, Jr., War As I Knew It (New York, 1980).
- Peter Paret, ed. *Makers of Modern Strategy, Military Thought from Machiavelli* to Nuclear Age (Princeton, 1986).
- Pogue, Forrest C., The Supreme Command("United States Army in World War II: The European Theater of Operations") (Washington, Office of the Chief of Military History, U.S.A., 1954).
- Ritter, Gerhard, *Frederick the Great*, ed. and trans Peter Paret (Los Angeles, 1974).
- Rommel, Erwin, *The Rommel Papers* ed by B.H. Liddell Hart, trans by Paul Findlay (New York, 1953).
- Rothenberg, Gunther E., *The Art of Warfare in the Age of Napoleon* (London, 1978).
- Savkin, V.Y.E., *Operational Art and Tactics*, translated by the US Airforce (Washington, 1972).
- Seeckt, Hans von, Thoughts of a Soldier trans by Ian Hamilton (London, 1930).
- Simpkin, Richard S., Race to the Swift (Virginia, 1985).
- Slim, William, Defeat into Victory, (New York, 1956).
- Strachan, Hew. European Armies and the Conduct of War (London, 1983).

Sun Tzu, The Art Of War. ed, and trans Samuel B. Griffith, (New York, 1971).

- Thibault, George Edward, ed., *The Art and Practice of Military Strategy* (Washington : National Defence University, 1984).
- Thompson, Julian, *The Lifeblood of War : Logistics in Armed Conflict*, (London, 1991).
- Thucydides, The History of the Peloponnesian War (New York, 1935).
- Tuchman, Barbara, *The Guns of August* (New York, 1962), translated and published as *Août 14* (Paris, 1962).
- Van Creveld, Martin, Command in War (Cambridge Mass, 1985); Macmillan, Inc., 1991; Supplying War : Logistics from Wallenstein to Patton. (New York, 1977); On Future War (London, 1991).
- Von Luck, Hans, Panzer Commander (New York, 1989).
- Wavell, Archibald Percival, 1st Viscount, Soldiers and Soldiering (London, 1953); Generals and Generalship (London, 1941);and Allenby, Soldier and Statesman, (London, 1946).

OPERATIONS OTHER THAN WAR

- Boutros-Gahli, Boutros. *An Agenda for Peace : Preventive diplomacy, peacemaking and peace-keeping.* Report of the Secretary-General pursuant to the statement adopted by the Summit Meeting of the Security Council on 31 January 1992, dated 17 June 1992.
- Fall, Bernard B., Hell in a Very Small Place : The Seige of Dien Bien Phu (Philadelphia, 1967); Street Without Joy : Indo-China at War, 1946-1954 (Harrisburg, 1961).
- Gellner, John, *Bayonets in the Streets : Urban Guerillas at Home and Abroad* (Toronto, 1974).
- Griffith, Samuel B. Mao Tse-tung on Guerilla Warfare (New York, 1961).

Guevera, Che, Guerilla Warfare (New York, 1961).

Harbottle, Michael, N., ed. Peacekeeper's Handbook.(International Peace Academy) (New York, 1984.)

Haycock, Ronald, ed. Regular Armies and Insurgency. (London, 1979).

Kitson, Frank. Low intensity Operations : Subversion, Insurgency, Peacekeeping (London,1971).

Lawrence, T.E. Seven Pillars of Wisdom (London, 1929).

Mao Tse-Tung. Selected Military Writings Of Mao Tse-Tung (Peking : Foreign Languages Press, 1967).

Mockaitis, Thomas R. British Counterinsurgency, 1919-60. (London, 1990).

Rikhye, Indar Jit. The Theory & Practice of Peacekeeping (New York, 1984).

Summers, Harry G. Jr., On Strategy : A Critical Analysis of the Vietnam War (Novato Calif., 1982).

CANADIAN MILITARY STUDIES

- Eayres, James, In Defence of Canada, vol I, vol II vol III, Peacekmaking and Deterrence (Toronto, 1972); vol IV, Growing Up Allied (Toronto, 1980).
- English, John A. *The Canadian Army and the Normandy Campaign : A Study of Failure in High Command* (New York, 1991).
- Gaffen, Fred. In the Eye of the Storm : A History of Canadian Peacekeeping (Toronto, 1987).
- Graham, Dominick, *The Price of Command : A Biography of General Guy Simonds* (Toronto, 1993).
- Granatstein, J.L., *The Generals : the Canadian Army's Senior Commanders in the Second World War*, (Toronto, 1993).
- Harris, Steven J., Canadian Brass : The Making of a Professional Army 1860-1939 (Toronto, 1988).

Hitsman, J.M., The Incredible War of 1812 (Toronto, 1965).

- Hyatt, A.M.J., *General Sir Arthur Currie : A Military Biography* (Toronto, 1987).
- Morton, Desmond, A Military History of Canada; From Champlain to the Gulf War (Toronto, 1991).
- Nicholson, G.W.L., Canadian Expeditionary Force, 1914-1919 :("Official History of the Canadian Army in the First World War, 1914-1919) (Ottawa, 1962); The Canadians in Italy("Official History of the Canadian Army in the Second War", Vol II) (Ottawa, 1956).
- Mowat, Farley, The Regiment (Toronto, 1973).
- Pariseau, J.J.B. Forces armées et le maintien de L'ordre au Canada, 1867-1967 : un Siecle de l'aide au pouvoir civil, these DesL, Montpelier : Universite Paul Valery III, 1981.
- Stacey, C.P.The Canadian Army 1939-1945(Ottawa, 1948); Six Years of War : The Army in Canada, Britain and the Pacific and The Victory Campaign ("The Official History of the Canadian Army in the Second World War," Vols. I and III) (Ottawa, 1955, 1960).
- Stanley, George F.G. Canada's Soldiers :The Military History of an Unmilitary People. Toronto : Macmillan, 1960; The War of 1812 : Land Operations (Toronto, 1983).
- Steele, I.K., Guerillas and Grenadiers (Toronto, 1969).
- Sweetenham, John, McNaughton, 3 vols (Toronto, 1968).
- Wood, H.F., Strange Battleground ("Official History of the Canadian Army in Korea") (Ottawa, 1965); Vimy (Toronto, 1967).