

TRAINING TO FIGHT AND WIN:

TRAINING IN THE CANADIAN ARMY



Brigadier-General Ernest B. Beno, OMM, CD (Retired)

Foreword by
Brigadier-General S.V. Radley-Walters, CMM, DSO, MC, CD
(Retired)

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(Edition 2, May 2001)

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TRAINING TO FIGHT AND WIN: TRAINING IN THE CANADIAN ARMY COMMENTS AND COMMENTARY

"I don't have much to add other than to support the notion that the good officer is almost always a good teacher."

- Lieutenant-Colonel, (Retired), Dr. Doug Bland, CD Queen's University
- "Your booklet was a superb read, packed with vital lessons for our future army Regular and Reserve!"
 - Brigadier-General (Retired) Peter Cameron, OMM, CD Honorary Colonel, The 48th Highlanders of Canada Co-Chair Reserves 2000

"This should be mandatory reading for anyone, anywhere before they plan and conduct training."

 Lieutenant-Colonel Dave Chupick, CD Australia

"I believe that your booklet is essential to the proper conduct of training in the Army, and I applaud your initiative in producing it. As an overall comment the individual training of a soldier should ensure the ability to 'march, dig and shoot.' If these basics are mastered then the specialty training and collective training can be the complete focus of the commander's/CO's concentration."

• Colonel (Retired) Dick Cowling London, ON

"I think this is the first 'modern' look at training in the Canadian Army that I heard of for thirty years. Well done on tackling such a venture."

 Colonel (Retired) Bill Dawes, CD Ottawa, ON

"The most important challenge facing any peacetime army is to keep its warfighting capability alive - and this can only be accomplished through training, which, as General Beno so commendably demonstrates, is clearly an art to be studied in depth."

• Lt. Col., Dr. John A. English, CD United States Naval War College "As the OC of a maintenance company in Calgary and later the CO of a service battalion in Germany, one of my most important responsibilities was the creation and implementation of my annual training plan. I'd like to think I did a pretty good job, but with the guidance laid down in this book of Ernie Beno, I know I could have done it better. Bob Baxter had it right; the CO of a service battalion is also its training officer first and foremost."

 Brigadier-General (Retired) Jim Hanson, CD Honorary Lieutenant-Colonel 25 Service Battalion Toronto, ON

"Training is the essential essence of successful soldiering. Axiomatically, then, it is the essential essence of winning war fighting - the fundamental purpose of any army. General Ernie Beno must be commended for his initiative in producing this seminal work which is the first comprehensive effort in almost three decades to articulate contemporary principles and practices for training the Canadian Army."

 Lieutenant-Colonel (Retired) Peter W. Hunter, CD Honorary Lieutenant-Colonel, The Governor General's Horse Guards Co-Chair, Reserves 2000

"A commander's most important responsibility in peacetime is to deliver effective training to his subordinates. General Beno's precis offers simple, clear and relevant advice to accomplish this most important of missions."

 Colonel (Retired) John Joly, CD Kingston, ON

"As General Rad and others have said, training for war is the raison d'etre of a peacetime army and this is where we must focus our training programme content, our training standards and our training tempo. During my years at Suffield I had an opportunity to meet and discuss training with a number of senior officers of the British Army. All of them maintained commitment to the concept of training 'high to operate low.' The other way around, as is so aptly pointed out in this booklet, is dangerous and wrong."

 Colonel Peter Kenward, OMM, CD Ottawa, ON

"Thank you very much for asking my opinion to review and comment of 'Training to Fight and Win: Training in the Canadian Army'. It may amuse you to know that I have a copy of your original booklet, and that it is located in the upper left hand drawer in my office. I am sure it will also interest you to note the remarkable similarities between 1 CMBG's Training Plan and the combined

arms training schedule that you have outlined. This is not a coincidence. My compliments for a job well done."

 Colonel Andrew Leslie, OMM, MSM, CD Commander
 Canadian Mechanized Brigade Group

"Army leaders train the Army in times of peace and command it in conflict. To facilitate the former, Army leaders at all levels should read this common-sense training booklet, then put it in a handy pocket of their combats and keep it there as a constant reminder of the training requirements of our profession."

- Colonel Matt MacDonald, OMM, MBE, CD Commander
 Canadian Mechanized Brigade Group
- "Attention to the training aspects of the army is most welcome from a Militia perspective. There has been little if any change since World War II. Educational methods, philosophy, and effectiveness in other areas of endeavour have progressed dramatically. The Canadian Navy and Air Force are "streets ahead" of the Army using simulation. Military forces are trainers and educators as a "sine qua non" to effectiveness. It's time that on the armoury floor training, computer based training (CBT) and modern training methodology, including simulation, be adopted.

"Certainly the Militia needs to "train to retrain" their officers, NCO's and good soldiers in order to achieve acceptable attrition rates and also to correct the criticism that cross training is a deficiency in regular force augmentation. In times of fiscal restraint we have to go to such methods to be cost effective and still achieve trained troops."

Fred P. Mannix, CD
 Former Honorary Colonel
 The Calgary Highland Regiment

"Training to Fight and Win will be a must-know and must-read for those in the Army who want to be knowledgeable about their craft. In war, platoon and section commanders have power over the lives of their troops. Junior leaders must make every effort to improve their military knowledge in all aspects, and by putting that knowledge into practice justify themselves as fit to be leaders in action. They do this through good training."

• Chief Warrant Officer (Retired) John Marr, OMM, MMM, CD Rothesay, NB

"Training is much more than a process that adds to the skills of a soldier or unit. It is about improving the performance of an individual or a group, and hence increasing the unit's effectiveness. "Training to Fight and Win" systematically identifies the essential components soldiers and commanders at all levels will use to create operationally capable units. This booklet should be read widely throughout the Canadian Army. I encourage readers to highlight key ideas, thoughts, or lists, review them and discuss them, but then get out there and do something with them!"

 Lieutenant-Colonel (Retired) Bob Parsons, CD Canadian Military Engineers, Toronto, ON

"I enjoyed reading your booklet on training. On the subject of planning: If in doubt, allow more training for lower levels of command, rather than leaping into unit or formation exercises."

 Lieutenant-Colonel (Retired) Brian Reid, CD Kemptville, ON

"This booklet is full of good, old-fashioned, common sense and lessons learned the hard way. When Canada has to mobilize our Army again, as it will, despite all the wishful thinking these days, it will be invaluable. It is a mark of BGen Beno's total dedication to the Army."

• Lieutenant-Colonel (Retired) John A. Selkirk, CD Honorary Colonel, The Brockville Rifles

"Your points are well taken, especially the training of commanders by having them take an active part in exercises rather than acting as Directing Staff. During the Second War there were a few Commanding Officers with a reputation as good trainers (good at the drills), and they were moved from unit to unit to bring them up to scratch. However, when commanding in action weren't able to cope with all the unexpected situations and had to be removed. The rule is something will go wrong, so the more one exercises with troops where one deals with the unexpected, the better one is prepared to react positively in war."

• Lieutenant-Colonel (Retired) Jamie Stewart, MC, CD Kingston, ON

"The main theme, as I see it, is that training is vitally important to our army and that to be effective it must be planned and executed in a deliberate and thoughtful way by commanding officers and commanders. If officers follow the guidance contained in this booklet they will achieve their training endeavours and their commands will be properly prepared to undertake operations."

• Major-General (Retired) Bob Stewart, CMM, CD Victoria, BC

"I think that what you are doing is long over-due and further that you are the right person to compose an edict on training."

• Major-General (Retired) Brian Vernon, CD, Comox, BC

"Over the twenty-five years when I was most closely associated with field operations I believe that there were only a relative handful of officers whom I would consider excellent trainers of units. Your training manual should be an initial step in redressing this matter."

 Lieutenant-Colonel (Retired) Mike Walker, OMM, CD Ottawa, ON

"I think that your paper is excellent, and the topic "TRAINING," is bang on. In fact the paper covers all the right things and in the right detail. Personally, the best trainer I ever came across was Ian Fraser. Much of what he taught me I used later on as CO I RCHA."

 Colonel (Retired) Doug Walton, OMM, CD Vernon, BC

"There is definitely a need for a pamphlet or precis on the subject of training. There used to be a few good British pamphlets on specific aspects of training but, for the most part, one had to read autobiography or really good biography to find out what worked well in training in the past. Those who were fortunate enough to 'grow up' under COs or OCs who were good at training had models to follow. Others were less fortunate. Your booklet will stimulate thought about training - and that should help fill some of the gaps."

 Major-General (Retired) Howie Wheatley, CD Ottawa, ON

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FOREWORD

by

BRIGADIER-GENERAL (RETIRED) S.V. RADLEY-WALTERS, CMM, DSO, MC, CD

"They left a trail of triumphs behind them and did honour to their country wherever they set the print of their hobnailed boots."

Colonel C.P. Stacey, History of the Canadian Army 1939-45



General "Rad" Radley-Walters: A superb Trainer

Personal experiences generally end up as our best teacher. Such "lessons learned"

should be passed on to succeeding generations so that they might benefit by using this information to better interpret and understand their own circumstances.

Already more than 50 years have gone by and the battle experiences that were gained by Canadian soldiers in World War Two, Korea, and elsewhere have, in many cases, been irretrievably lost. Fortunately, much of this hard-won wisdom has been preserved, including General Worthington's comments on success in battle. "The father of the Armoured Corps," speaking many years ago to a group of officers at Camp Borden, said that success in battle depends on three vital and interdependent essentials which have stood the test of time, including: the quality of our leadership, the quality of our equipment and military organizations, and the quality of our training.

These essentials are easy to lose sight of in peacetime, but they are absolutely vital to our profession. Training supervision and direction begins at the top of our military structure and works its way down to the lowest levels of the chain of command: it doesn't work the other way around.

General Montgomery, for example, always insisted that his training directives were distributed down to the level of junior leaders training in the field. I remember those pamphlets contained simple diagrams and were easy to understand, covering both the aim of a particular operation and the training factors to be considered under battle conditions. The pamphlets were made small enough to stick in a battledress pocket, which made sense to soldiers training in the field. As a result they were more likely to be consulted and used than some of today's bulky and voluminous products.

My Canadian Army experience spans the Second World War, the Korean and NATO eras, and Unification. In WW2, we discovered that you

learn the "tricks of the trade" a lot faster when someone is shooting at you, but the cost in casualties is high - unacceptably high. Training to support the NATO brigade and the Korean War had a similarly stimulating effect on our schools and training objectives with the introduction of new equipments and the recruitment and mobilization of units and reserves which all had to be trained quickly. The possibility of nuclear war also had a profound impact on training and tactical doctrine. Finally, Unification created new challenges to training organizations and methods. Tactical doctrine and "all arms" training standards were centralized under a tactics wing of the Combat Training Centre. When I retired from CTC I was concerned that the new tactics wing was the weak link in the Centre's organization, and to this day I vigorously support the establishment of a Tactical Battle School to train our Army under realistic battle conditions up to the brigade group level.

The history of the Canadian Army reflects the highest standards of learning and adaptability. BGen Beno's booklet is part of this continuing tradition, and it is a great privilege to be asked to contribute this foreword to his work. I encourage commanders at all levels, Regular Force and Reserve, to read and study this booklet, and to put into practice the fundamental principles and training concepts which are so well articulated. Training for war is the raison d'etre of a peacetime army. Canada, and especially her young men and women, deserve nothing short of the highest standards of training, proficiency and professionalism in their army. Their leaders owe this to them. I believe that this booklet will help foster these ideals.

Rad March, 1999



TRAINING TO FIGHT AND WIN: TRAINING IN THE CANADIAN ARMY

PREFACE

My purpose in writing this booklet is to pass on my thoughts on training in the Canadian Army. As a minimum, I wish to stimulate thought, discussion and action on this subject - but my ultimate objective is to help create and maintain an operationally effective army. This is not the "Bible" on training, it only offers a point of view on some of the many aspects of this very complex and important subject - some would say, myself included, the most important subject of concern to the Army, short of operations.

Years ago I wrote a paper entitled "Training To Be Sound Soldiers and Good Gunners". Twenty years later on, I was surprised to see it still being used at the Field Artillery School, some 20 years later, as a reference for the Instructor-In-Gunnery Course and other courses. This is not a credit to me; rather, it is a reflection of the dearth of thought and writings on this vital subject, or more importantly, the lack of coherence and relevance of the doctrine that does exist. I am not sure how relevant that paper really is today, but my gut feel is that the principles of training haven't changed that much over the years, much as people and learning principles haven't change that radically. Equipment, doctrine and tactics change, and should change, but training principles remain constant. In fact, when I wrote that paper I referred frequently to a First World War pamphlet, "Field Artillery Training 1914". My impressions at that time were that the training principles were reasonably timeless and they were relatively universal. I still believe that.

Good training and hence operationally effective units will be the result of applying the principles effectively. Those who choose to ignore or overlook the fundamentals might well achieve short-term aims, but their troops will not be sufficiently well trained to withstand prolonged operations or meet the multiplicity of demands of today and the future.

This booklet sets out some of my reflections on training based on over 37 years in uniform, in the Reserves and Regular Force, from gunner to brigadier-general. I have seen some outstanding trainers in that time. There is no question but that the best training happened to be when we had a clear operational focus and dynamic, imaginative leadership. Instructor-in-Gunnery and Company Commander courses taught me much - but not as much as when I observed professional trainers in action. The great trainers were also superb leaders who knew what they wanted, understood the motivation and capacity of people and applied logic and common sense to achieve high standards. They realized how important training is to discipline, morale, competence, cohesion and professionalism, and how important these are in training.

Perhaps had there been greater attention to training throughout the

Army over the past few generations we may have been spared some of our most recent traumas. I for one have learned a lot and reflecting on 'my lessons learned' has been instructive. I am convinced that systemically a lot more reflection, energy and resources should go into training because this will save the lives of young Canadians, while enabling the Army presence, readiness and to win in operations. Given adequate resources, good leadership and sound training the Army will be able to perform as asked.

I attempted to make this a booklet which could be applicable to both the Regular Force and the Reserves. No doubt my mostly Regular Force background shows, and although the principles would apply equally to the Militia, especially if and when mobilized.

My thanks to all those who assisted in developing this booklet, and especially the many soldiers I have served with and trained with over the years. I sent my drafts to many, and the advice, wisdom, and sound counsel I have received is much appreciated. If I chose to disregard it or if I missed the point, I accept full responsibility. If this booklet is useful, it is because of the input of others and of what I have learned from fellow soldiers over the years.

I dedicate this booklet to the memory of Brigadier (Uncle) Stanley Todd, CBE, DSO, ED, CD, a veteran of the First and Second World Wars, a dedicated Militia officer, the CRA of 3 Canadian Infantry Division on D-Day, Commander Corps Artillery of the 2nd Canadian Corps, Brigade Commander First Canadian Infantry Brigade, and a soldier and trainer of great renown. He was still lecturing at the Army Staff College in May of 1996, at the age of 98, weeks before he tragically died right before the eyes of his colleagues at a RMC Club dinner! He was a trainer, teacher and mentor to almost eight generations of Canadian soldiers in peace and war in the Permanent Force and in the Militia. No doubt he would critique this from his "Stand Easy" position in the sky.

Since retiring I have conducted my own comprehensive "After-Action Review," and on the subject of training these are my reflections. I hope that my "lessons learned" will be of benefit to future generations of the Canadian Army.



The author with Brigadier ("Uncle") Stanley Todd - Petawawa, 1988



A WORD OF THANKS

I would like to express my sincere thanks to the many people, serving and retired, who offered ideas and critique on this booklet. Some of the ideas I borrowed, all of the critiques I learned from. One never stops learning, or at least shouldn't, and one should never stop passing on "lessons learned."

I remember when I was a Deputy at the Staff College and we invited Brigadier Bill Ziegler, the former Commander Royal Artillery, First Canadian Division,



to join us on the Battlefield Study of the GOTHIC LINE, Italy. He was to give a lecture at the College before departure and then pass on gems to us on the ground. He arrived in Kingston mid-day and had dinner with my wife and me. That evening he said that none of his war experiences were coming back to him, so if I didn't mind, he'd like to give it all a pass — forget the lecture the following day,



and he'd head back to Edmonton. After a brief chat (and a scotch or two) he accepted that he would stay to answer a few questions in Korea Hall, but the war wasn't coming back to him, so he "wouldn't be much use." Once in front of the sixty or so bright young army captains, after a few hums and haws, he opened right up and told them not only how he fought artillery then, but how they should today — and, how to fight as an all-arms team!

By the second day in Italy, using maps, charts and prepared notes, with shooting stick in hand, he pointed out over the battlefields and described how they had fought that war, giving lessons on how we will have to fight the next one. He essentially took over the job of DS. He had learned his lessons the hard way, and as our self-appointed mentor, tutor, teacher, he became intent on passing those on.

I would especially like to thank Brigadier Ziegler for his outstanding personal example as an army trainer. He re-did these Italy tours several times and spoke to junior Gunner Officer gatherings for years. And he never stopped learning. At 84, on the 50th anniversary of the end of the Second World War, he received his Bachelor of Science in Civil Engineering at the University of Alberta — a degree he gave up as a Militiaman in 1940 to fight the war for Canada. Learning never stops, and good soldiers pass on what they have learned.

Thanks Brigadier Ziegler.

I also wish to thank Captain (Retired Regular Force and now sometimes Militia) James O'Brien, MA (English) and soon MBA, for urging me on. Also, Major Pierre Lepine, MA (War Studies) and soon PhD, for getting me started on this, Lieutenant Colonel (Retired) John Davidson who found the detailed errors, and set me straight, and RESERVES 2000 for engaging Sabina McGrath to do the final editing job. Also, Public Archives Canada and the Department of National Defence (Army Lessons Learned Cell) for many of the photographs.

My Thanks to RESERVES 2000 for their support in producing this booklet.





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TRAINING TO FIGHT AND WIN: TRAINING IN THE CANADIAN ARMY

by Brigadier-General Ernest B. Beno, OMM, CD (Retired)

"It is the present writer's impression, however, that the Canadian Army also suffered from possessing a proportion of regimental officers whose attitude towards training was casual and haphazard rather than urgent and scientific: like the traditional amateur actor, they were cheerfully confident that it would 'be all right on the night' without their having to extend themselves too much." ¹

- Colonel C.P. Stacey

Official History of the Canadian Army in the Second World War

PART 1 TRAINING AND LEADERSHIP

BACKGROUND

Canadian Army units and formations exist to conduct military operations in support of government objectives, as directed by the Chief of Defence Staff. While operations are the reason for the existence of military forces, the main activity of army brigades and units during peacetime is, and should be, training. Training prepares units and formations to conduct operations. Their training, therefore, should focus primarily on two corresponding overall objectives:

- achieving a multi-purpose combat capability; followed by,
- training for specific missions.

Within the Canadian Army the focal point for training development and delivery has been the brigade or brigade group. This organization is well-structured and organized to conduct, oversee and evaluate training. Brigades must maintain high levels of readiness in order to react to short notice taskings while remaining flexible enough to take on any assigned missions. Brigade commanders have the right to expect commanding officers (COs) to produce well-trained units, trained to meet the specific-to-brigade standards set by the brigade commander, and trained for a variety of contingencies. Although much of the training in the Canadian Army has been and is focussed at brigade level, it should be set within a broader doctrine of divisions and corps, and the goals, objectives, standards and very philosophy set at levels higher than brigades.

The current national fiscal situation (probably no different than most previous generations) puts pressure on the Army to train effectively with fewer resources. Inattention to training raises the possibility that readiness standards might erode to a level where unit standards would be lower than is professionally acceptable. In practical terms, this climate obliges us to more clearly define the desired levels of training and then balance the resources such that the optimum training needs are being met. Commanders at all levels, including the commander of the Army, must identify and make clear distinctions between:

- the desirable.
- · the achievable; and
- the affordable:

Commanders have to analyze our requirements and prioritize their training much more clearly than in the past, and then focus on the best way to achieve the desired requirement in the most important functions, with the minimum expenditure of resources. In other words, commanders at all levels must ensure that they train smarter. This does not mean that they have to train longer, harder, or expend more ammunition or fuel, for these are no longer options. What it means is that they should find the training which produces the maximum desired effect with the minimum expenditure of resources, and at the same time aggressively seek out and eliminate the least effective training activities.

An Army that is properly trained and led is better prepared to respond to situations requiring the employment of armed force. Such situations will arise and the Army, as the force of last resort, must respond and should respond effectively. It can only do so through sound leadership and quality training.

AIM

The aim of this booklet is to pass on my "lessons learned" on training in the Canadian Army.

My intent is to stimulate thought, discussion and positive action on training, particularly collective training, in the Canadian Army. My ultimate objective is to help produce sound army units which reflect the following characteristics:

- sound leadership;
- good command and control;
- · cohesion;
- standardized ways of doing things;
- sound discipline and a disciplined way of doing things; and
- the use of good battle procedure whether the task at hand is operational or administrative in nature.

This booklet will outline some principles of training in the Canadian Army to assist unit and formation commanders and their staffs in this most important of military activities. Included are specific proposals for the design, conduct, evaluation and support of training. Leadership, the other ingredient for success, can be developed through training, and of course sound leadership enhances training. It is not the principal subject of this booklet, but is closely related to this discussion.

LEADERSHIP

This booklet is not about leadership, but it is abundantly clear that the effectiveness of units is dependent upon good leadership. The quality of training is magnified greatly by good leadership and no matter how good the training plan, training process or training activities happen to be, without sound leadership the effectiveness of the unit in fulfilling its operational mission will be significantly reduced. Leadership in its entirety:(selection, training, development, evaluation, research, and doctrine) needs to be re-thought in the Canadian Forces and particularly in the Army. We've got some of the right courses but I don't believe that we place enough emphasis on this core matter-from training section commanders through to developing generals. We don't even have an "owner" or "patron" for leadership, but there are several "management" gurus and much money spent on promulgating management materials.

In our training at all levels, section to division, especially in a

resource-

constrained army, the emphasis in training should always be on developing leaders. We need to create operationally effective units to meet specific tasks and we must train in operations of war to develop and maintain our capability in current doctrine - but it is through the development of sound leaders that we will be ready to



The emphasis on training should always be on developing leaders

meet the tasks of today and prepare for the unknowns of the future. So even as we train operationally and train to do the job, in the back of our minds we must realize that developing leaders is of greater importance in the long term. We typically do not have the resources to train to a capability or level we would like. Nonetheless, by emphasizing thinking leaders, intellectual agility and robustness, a common sense approach to operational matters, and ethical conduct, we will at least ensure that we can effectively and professionally employ all of the resources we do have and any that might come to hand in emergencies or war. Perhaps large armies can do things differently and rely on a "forces in being" philosophy, but history has shown that the Canadian Army

should capitalize on training its people and especially on developing its leaders. With good leaders trained for war we can make a difference with whatever technology comes to hand.

As Brigadier Stanley Todd put it: "Training leaders takes time and effort, but even in the absence of material much can be done to raise professional competence and to stimulate intellectual curiosity."

Although this booklet concerns the subject of training, it has in mind these basic philosophies on leadership. It considers sound leadership as fundamental to conducting good training and it emphasizes the exercise and development of sound leaders through good training. Sound leadership is as essential and good training are absolutely interrelated in achieving an operationally effective army.



PART 2 TRAINING PURPOSE



Training "focuses should be on the warfighting capabilities".

PURPOSE

Selection and Maintenance of the Aim is the first principle of war, but all too often it is overlooked in training.

It must be made clear from the outset that the purpose of training is to ensure that military forces are capable of fighting and winning. To support national causes at home and abroad the Armed Forces must have the capacity to deal with the most extreme of demands, not just the minimal envisioned at any one time. The "lowest common denominator" philosophy which has permeated our thinking and actions, has in my opinion never been appropriate. As a nation we cannot afford to have forces in being to meet every imaginable situation, but what we do have must be focussed. I believe that focus should be on war fighting capabilities. The expression used these days is "multi-purpose combat capable forces," but great care must be taken to focus on the upper end of the multi-purpose combat capable force.

When I refer to focussing on the upper end I mean that our limited resources (for they will always be so in Canada) in terms of money, people, equipment and infrastructure, for the Regular Force and the Reserves, should be focussed on a modern operational capability, able to fight against a sophisticated enemy. We don't need the latest model of the top-of-the-line equipment all of the time, but our people, doctrine and philosophies must be at the leading edge in thought and practice. What training we do must be focussed and effective.

In 1972 Lieutenant-General Guy Simonds put it this way:

"The armed forces should primarily be trained and equipped for the possibility of conflict with a first-class power - the most severe testing they may have to face. It has been proven over and over again, that well trained and well disciplined military forces, trained primarily for major warfare, can easily and effectively adapt to lesser roles of aid to civil power or peace-keeping. The reverse is not the case." ²



Lieutenant-General Guy Simonds*

^{*} Photograph courtesy of Colonel (Retired) Charles Simonds

We should pay attention to the wisdom of Guy Simonds, wisdom acquired through the "most severe testing". So, the purpose of training must be clear - and that is to maintain an operational capability against modern military forces. The lack of operational focus of the Canadian Army between the First and Second World Wars led to the deterioration of professionalism. Many young Canadians paid for this deficiency with their lives and we owe them out of respect for them and their families we have a professional obligation not to repeat this mistake. It is essential that no matter the resource limitations we face, we must institutionally keep the art of warfighting alive. As recently as March 1997, Professor David Bercuson's recommendation to the Minister of National Defence was that "The Army must focus the combat arms on one goal: training to fight wars." He is spot on.

THE DOCTRINAL BASE

"In discussing the Afrika Korps, the British official historian clearly understands what made the Germans such formidable opponents throughout the war: 'By insisting upon a clear and well-understood doctrine, thoroughly instilled on uniform lines, they made it possible for units and even sub-units to settle down quickly in new groupings and under new commanders with a minimum of confusion'." ³

- Millet & Murray

Military Effectiveness: Volume III, The Second World War

Doctrine may be defined as: Fundamental principles by which military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgement in application.

The warfighting capability of the Canadian Army will only be kept alive if it is founded on a realistic and well-conceived doctrine. A doctrine which is written by the generals who command the troops and a doctrine which is understood, practiced and followed by them and their subordinates. The doctrine should reflect a realistic Canadian Army mobilized - not necessarily an ideal army formation (a dream -world organization with all the bells and whistles) and certainly not a purely theoretical concept - but an army structured and equipped as Canada might in a future mobilization situation. Brigades and units will always function within divisions and corps in war, and the training philosophy should reflect these broader parameters. Such a sound doctrinal base would provide an atmosphere of unity of thought throughout the army, which is fundamental to efficiency, effectiveness and focus in training. It will provide a rationale for the training we do.

PART 3 TRAINING DESIGN

"Minute research preceded the organization of a campaign, and Napoleon himself issued the final orders on everything He regarded the long-term preparation and administration of a campaign as vitally important."

- Montgomery, on Napoleon A History of Warfare

PLANNING A TRAINING CYCLE

Sound planning is vital to achieving effective training, but the peace-time training design in Canada has always been a significant challenge. The seasons, the schooling system, the posting period and the weather have a dramatic effect on what is achievable and when/how the training is conducted. We typically end up with an annual cycle and it is impossible to achieve everything in that cycle. Recognizing the realities of Canada one must determine what is appropriate and achievable, and design the training around that starting with the principal focus, which I believe should be the creation of operationally capable units.

CREATING OPERATIONALLY CAPABLE UNITS

It is the units in the Canadian Army which have kept the profession of arms alive - the regiments and battalions. They have carried the profession through tough times, and still do. It is vital that we get things right at unit level - training being the most important of activities.

Training is the key to creating operationally capable units. At any given point in time, a brigade commander must be able to assess a unit's capability (readiness). This determination will be based on examining the unit's location in its training cycle and measuring the unit against the associated proficiency benchmark (i.e., Battle Task Standards) for that stage of the training cycle. The commander seeks answers to the questions:

- Where is the unit in its training cycle?
- Is this position valid, i.e., have the associated standards been met or exceeded?

The brigade commander must also measure how much "top up" training is required to achieve a specified level of readiness. If asked to prepare a unit to participate in a specific operation, the commander must be able to identify and measure the training gap.

Brigade commanders must issue clear, focussed and comprehensive

training guidance to COs who then must produce sound training plans based on established priorities and expected standards. COs must take care to avoid trying to do a few exotic and energy-consuming activities when their units have not yet mastered basics skills or met the standards expected.

FIGURE 1 - Training Standards and Expectations

STANDARDS	MULTI-PURPOSE COMBAT	MISSION SPECIFIC OPERATIONS			
OF TRAINING	BATTLE TASK STANDARDS	BATTLE TASK STANDARDS			
INDIVIDUAL	Laws of War Marksmanship Fieldcraft Fitness, etc.	ROE First Aid Weapons Handling Fitness, etc.			
SECTION	Determine the capability of units based on where they				
PLATOON	are in the Training Cycle, and the Battle Task Standards or Readiness Standards that they have mastered.				
COMPANY	Then determine the "Top-Up" training required.				
BATTALION COLLECTIVE	Deliberate Attack Hasty Attack Defence Counter Attack Minefield Breach etc.	Cordon & Search Crowd Control Airmobile Insertion etc.			

TRAINING PLAN DIRECTION

In a brigade training plan, the brigade commander:

- states his intent and his concept of training; then
- gives specific direction for individual and collective training; and
- assigns resources to tasks.

The plan also:

- provides guidance on the method of preparing for operational tasks and emergencies;
- · notes the restraints and constraints; and
- gives specific direction to COs on unit objectives and responsibilities.

All of this assumes that the commander has received Army and Area direction and has in turn done a training estimate for his formation. It also

assumes that the Army has a sound tactical doctrine which leads to realistic battle task standards, which can be translated into objectives. Considerable indepth thought and reflection needs to go into the front end of the training planning process.

Training guidance should:

- direct that all individual soldiers are:
 - -disciplined a steady, competent, confident discipline, and based on self-discipline;
 - -physically and mentally fit and robust, or as Montgomery said: tough;
 - -proficient in basic weapons skills, tactics and field craft (for all arms and services); and
 - -capable of proficiently performing their primary occupational skill and function, plus that of their immediate superior;
- emphasize combined arms operations at the company/squadron group level but master the company, squadron or battery level first;
- preserve the capability of the brigade to respond to short notice operational tasks and emergencies, i.e., maintain flexibility;
- give COs enough guidance to achieve the broad objectives of the brigade commander and specific guidance to train to mission; and
- emphasize leadership development and the training of individuals for higher positions.

Assuming limitations in time, resources and training facilities will continue to exist, commanders will be forced to set priorities. I believe that the highest priority training task, with the greatest potential return in operational capability and flexibility, is the training of effective combat teams. Combat teams, made up of elements of infantry, companies, task squadrons and their affiliated artillery of engineer components, are the building blocks of the Canadian Army's capability. COs can train their companies, squadrons and batteries, but the components which give them the greatest operational strength and give the brigade commander the greatest flexibility are the combat teams. Their training under live fire conditions, at least once per year, should be explicitly stated as the minimum acceptable standard across the Army.

Commanders must avoid the long "shopping list" approach in giving direction on training. A few years back we would get a great list of things that needed to be completed in the year, and at each subsequent subordinate head-quarters a few more things would be added on. There simply was not enough time in the year to do it all and there was no clear focus. But the higher HQs were "covered" because they told you to do this and that. The other way of training for offensive operations one year and defensive, or whatever, the next was often equally confusing because training years, fiscal years, school years, the posting cycle and the Militia cycle were out of synchronization with each other - and even the staff were confused. So, commanders must reflect, focus

and give rational guidance, and the staff should coordinate and synchronize.

It is essential that commanders personally involve themselves in this most important of activities. It cannot be left to the training staffs. Hard decisions must be made and clear and logical direction must be given, and only those in command can do this.

"You must write things down and work through your ideas. If they do not make sense to you, they will not make sense to anybody else, and certainly not to your organization. Your hardest job will be communicating your concept, intent, and objectives." ⁴

- General Gordon Sullivan and Colonel Michael Harper Hope Is Not A Method

TRAINING RESPONSIBILITY

As with leadership, everyone thinks that they understand training and everyone has a responsibility for training, but it is hard to find who is accountable for training. The initiatives to designate an army "training authority" are a start toward putting accountability in place, but if he does not command the units and formations being trained, if that officer cannot set their agenda, if he cannot control their resources allocated for training, then in the final analysis he cannot be held accountable to produce trained units and formations. So the best he can do is develop policy, guide individual training, write the doctrine and assist when called upon.

If all agree that training is the most important activity of a peacetime army, then the authority, responsibility and accountability for training must be more clearly articulated, and the ability to influence training must be given to the positions which have the responsibility to produce trained soldiers and units. The lines between those who deliver training and those who are accountable must be more clearly defined.

THE COMMANDING OFFICER

The commanding officers of battalions and regiments, in my opinion, play the principal role in the actual conduct of training. They are the key individuals in the training activity. Matters may have become a bit fuzzy over the past few years, but in the Canadian Army tradition and practice, "the authority of the commanding officer within his unit is paramount." (Canadian Army Manual of Unit Administration and Discipline, 1957) ⁵. The CO is responsible for and should be held accountable for the training of his unit and the soldiers within it. Montgomery placed "sub-unit efficiency" immediately after the stage management of battle in his order of "lessons learnt". If companies, platoons, squadrons, troops and batteries lacked the requisite skills, initiative and leader-

ship, the best laid higher plan was unlikely to succeed. It is the commanding officers who must train those sub-units.

When General George Kitching was selected to command the Edmonton Regiment in World War II, he wrote down a number of things that he must do. The salient points, in his words, were:

- 1. I had the responsibility for training all officers just as they had the responsibility for training their men.
- 2. All officers should be trained to take on the responsibilities of two levels above them, i.e., a platoon commander should be able to be the second-incommand of a company and also command it. Company commanders should be able to be second-in-command of a battalion and also command it.
- 3. We must expect heavy casualties among our officers and NCOs once we are in action, therefore we must train replacements now; and ensure a steady flow of young officers by encouraging the men to go to officer training units.
- 4. Once satisfied that an officer knows his job decentralize and give him his head it's the best way of learning.
- 5. Check all faults as they occur don't let anyone think they can get away with anything. ⁶

General Kitching emphasized training as his principal focus upon taking command and note also, and more importantly, that he clearly understood what he wanted to achieve through training.

THE TRAINING ESTIMATE

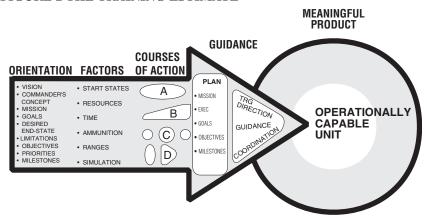
An estimate provides an orderly analysis of a problem leading to a reasoned solution. The following figure visually depicts a training estimate. The key components of the estimate are:

- the initiation step, in which a mission analysis is completed, based on guidance, information made available and limiting factors;
- the determination of the desired end-state, the centre of gravity to achieve it, and the training mission;
- the analysis of the training needs;
- the evaluation of factors;
- the examination of courses of action;
- the commander's decision; and
- the development of the training plan.

The plan is communicated through orders, instructions, directives and

commander's guidance, all focussed on achieving the desired end-state. As with all planning, the estimate is cyclical in that as circumstances change the process must be repeated and the plan modified accordingly. To ensure a high degree of flexibility in case circumstances (e.g., mission, resources, time, etc.) change "Branch plans" should also be thought through, and sequel plans should be considered to ensure a seamless follow-on from the plan adopted.

FIGURE 2 THE TRAINING ESTIMATE



COs must go through this thought process in developing a unit training plan and must discuss this plan with the brigade commander. Perhaps the hardest elements to determine will be the desired end-state (what is required with the time and resources available and other commitments), the centre of gravity (i.e., the key element of the training which will ensure successful achievement of the end-state), and the mission. The brigade commander must ensure that the CO's design for training meets his specified objectives. A discussion between commanders and subordinates will help clarify the intent and guidance, ensuring they have been correctly interpreted and applied.

At least semi-annually, and certainly prior to training for a specific mission, brigade commanders should call for a briefing from COs, who would review the points noted below:

- the higher headquarters' operational intent;
- the object (aim, scope, and context within the unit training cycle) of the unit's training;
- the principles and assumptions upon which the training is based;
- the standards which the CO expects to achieve and how they will be measured;
- the types of operations or phases of war for which the CO is preparing;
- how the CO has or will develop SOPs and drills, e.g., brainstorming, war gaming, bull-pen discussions, etc.;

- how officers and NCOs will be developed and trained, e.g., simulation, war gaming, TEWTs, etc.;
- the training calendar milestones; and
- the manner of feedback and ideas on mid-course corrections.

This list above is essentially borrowed from Field Marshal Montgomery's "General Notes on What to Look For When Visiting A Unit". It forces a CO to think through and explain the proposed training in a structured and disciplined manner. It also permits the brigade commander to advise and provide additional guidance to the CO prior to the commencement of training. Montgomery wanted to know "what the unit is worth, and if the C.O. knows his job." I believe that when the above elements are discussed with COs, commanders can soon determine if they know their jobs.

THE TRAINING ENVIRONMENT

Commanders at all levels must realize that they will face many facts of life in conceiving their training plans. Call these limitations (restraints and constraints), but they have to be dealt with, and perhaps they can be put to advantage. For example:

- There will no doubt continue to be a high level of turnover personnel in units, and repetition will be a fact of life;
- Resources will go through periods of feast and famine, probably more of the latter;
- Training areas may be inadequate and in the case of the Militia, inaccessible;
- The geography and climate of Canada is not about to change, nor is the seasonal cycle of the country;
- The operational tempo of units (either deploying or supporting those deploying) will probably remain high for the foreseeable future;
- There will be conflicting priorities such as assistance operations or ceremonial events.
- Organizations, equipments and the availability of key leaders may not permit strict adherence to accepted doctrine;
- Taskings of key personnel will continue; and,
- Training direction may lack clarity.

Regrettably these are some of the limitations commanders will have to work around, and they will ignore them at their peril.

TRAINING NEEDS

A key factor in developing a training plan is to determine the needs. I would break this factor down into understanding the hierarchy of training, and, understanding who the training audience is. Given the commander's guidance, the roles/mission, and a clear understanding of the needs of the audience, a commanding officer can focus the estimate and apply scarce resources where they can achieve the greatest impact. A successful training plan will satisfy these needs.

Training typically follows a hierarchy, which might be compared to Maslow's hierarchy of needs. It begins from a broad base (skills and capabilities which every soldier must possess) and then diminishing in numbers until at the top there are only a handful who practice the operational art. The levels of the training hierarchy might be:

- Basic Individual Skills (e.g., march, shoot, discipline, physical fitness, mental robustness, etc)
 - Specialist Skills (e.g., APC driver, signaler, pioneer, etc master the trade)
 - Crew/Team Skills (low level leadership is the key master the drills)
 - Sub-unit Competence (Master tactics at company, squadron, battery level)
 - Combat Team Capability (all-arms proficiency as a team)
 - Battle Group Operations (manoeuvre, fire coordination, logistic support)
 - Formation (brigade/division/corps joint and combined)
 - Grand Tactics/Strategy (Theatre-level operations)

The training audience in a unit is never a homogeneous group. There are several audiences with different needs and perceptions, and a clever training plan will accommodate these. For example:

- Soldiers with less than three years might prefer adventure, travel, excitement and the appearance of danger. They profess to enjoy live fire, rappelling, and mountain climbing, as examples. But, they need to be socialized and integrated into a cohesive team and they need role models so that they will be ready to assume leadership positions by the five-year point. They are quickly demotivated by dull or purposeless training and they normally have potential for far greater performance than what is recognized.
- Long-service corporals, many of the senior NCOs, and older captains might prefer predictability and a settled routine. They may have families and roots in the community, they would have been through several training cycles under different COs, and they may have completed multiple tours overseas. They have "seen it all before!" These folks are cooperative and obedient by nature, but their enthusiasm needs to be solicited. They have to perceive that a commander's training concept is sensible and purposeful. They need

to become engaged in activities they perceive as a professional endeavor and operationally essential. They are especially good at coaching and mentoring if they believe in the cause.

- Master corporals, junior sergeants, and subalterns have been selected and taught to lead, and wish to do so. They prefer an atmosphere of challenge, excitement and personal growth. They want to be pushed and want to push the envelope. Their energies should be channeled and exploited, but they need to be given the "left and right of arc." Older and wiser NCOs and officers should steer them and encourage them, allowing them to learn from reasonable mistakes.
- Captains, majors and lieutenant-colonels are the most serious professionals who understand the limitations of peacetime training and the gaps which must be addressed. They wish to expand their professional horizons and their warfighting prowess. They need war games, command post exercises and simulation to offset the peace time deficiencies in equipment and practices. They need to practise their skills "in private," e.g., tactical exercises without troops (TEWTs) and simulation, before using real soldiers. They then need opportunities in the field with their troops so that they can go through operations of war as a team to perfect the tactics and they need the opportunity to experiment.

Only with a profound understanding of the hierarchy of training and the needs of the training audience can a commander set out the means by which the training objectives will be achieved. There has to be a clear linkage between the audience and the goals/objectives, and the linkage must be understood by all participants.

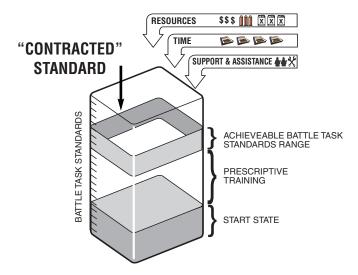
THE TRAINING CONTRACT

After detailed discussions of the training and its underlying philosophy, commanders and their subordinates should arrive at a mutual understanding or agreement (a contractual arrangement if you wish) specifying objectives, milestones, resources and the way that training will be evaluated. They should agree on what the desired end-state would be given the time, resources and focus provided - and both parties should adhere to the undertaking.

Brigade commanders and COs should agree in advance on what is required, what is achievable, and what is to be expected in terms of meaningful training accomplishments. They then establish a "contractual" agreement, stating clearly their respective responsibilities and obligations in order to achieve the "desired end-state".

FIGURE 3 - THE TRAINING CONTRACT

Due to resource limitations the best that can routinely be accom-



plished in terms of multi-purpose combat capability (in absence of a particular mission) may be to train to company or combat team level. If this is the case then that fact should be acknowledged up front, yet the limited training should still be of high quality. Restrictions on the scope of training should not adversely affect quality.

The brigade commander should take every opportunity to gather information about the unit's progress towards its training objectives. As a key stakeholder in the training contract, the commander must take an active interest (i.e., intellectual curiosity) in the conduct and validity of the unit's training. Visits, indirect observation and other forms of feedback are essential in order for the commander to develop an informed appreciation and remain abreast of developments.

As a basic principle of supervision/man management, the commander should ensure that the active collection and interpretation of this information does not interfere with the CO's job, nor give him the impression that he does not have the commander's confidence. If the commander feels a mid-course correction is necessary, he need only express his concerns in terms of the training agreement/contract. Governance of unit training will be well served by this arrangement.

At the same time, the CO should seek to engage the sense of purpose and commitment of all soldiers to the training concept and plan. The vision, ultimate intent, mission and campaign plan should be familiar to all members of the unit and every soldier should be able to understand his place in the larger picture. One might ask, what soldiers will give their all to a cause unless they know it is worthy and makes sense, that their own interests are being looked

after, and that their team has a chance of success? COs owe it to their soldiers to let them know what they are up to and why. All ranks must understand:

- the purpose and rationale for the training;
- the method of training;
- · how they fit into the grand scheme of things; and
- how the training will impact on them, their life, their career and their family.

Unquestionably, those who provide support within and to the unit must be engaged in the training plan discussions as early as possible to anticipate requirements, identify obstacles and suggest solutions and alternatives. They may often be left in the background, but their role in support of training is vital, as it is in operations. Being a critical part of the team, they need to be fully engaged.

Once a unit training plan is developed the CO should have discussions with company commanders, similar to those he had with the brigade commander, then provide relevant guidance and direction to his subordinates. The aim of the training, as always, is the creation of an operationally capable unit - all components of the unit and aspects of the unit's operations. The CO has the resources and the responsibility for training the unit, but the company commanders are the ones most intimately engaged in the training.

THE COMPANY COMMANDERS

Much has been said about the CO and his role in training - i.e., his responsibilities, the accountability, how he develops a training plan and his relationship to the brigade commander. Company commanders (and battery and squadron commanders) are much closer to the actual conduct of training and play a major role in its delivery. They have less control over the resources but are more closely in contact with the soldiers. They know the capabilities of their troops and must motivate them, push them and set the example for them. What they may lack in experience and wisdom they more than make up for in enthusiasm and energy. If there are deficiencies, they, the sub-unit commanders, are the ones to put things right through hands-on leadership - personal and up front. As the key leaders who get things done, as well as being the next generation of commanding officer it is critical that they be guided, educated and inspired by their CO.

COs should obviously not be planning unit training without full knowledge of the capabilities of their sub-units and without the total engagement of the sub-unit commanders. It will be through them, the company commanders, that he achieves the quality and intensity of the training he would like and the standards which are required. In the Canadian Army the companies/combat teams are the principal building blocks, but these will only be

robust and sound if they are well led by strong company commanders.

TRAINING BATTLE PROCEDURE

Doctrinally, battle procedure is: "the process by which a commander receives his orders, makes his reconnaissance and plan, issues his orders, prepares and deploys his troops and executes his mission". Battle procedure is something we practise in training but it also something we employ in designing training. In the training process, the battle procedure steps might be:

- analyse the long-term requirements and training direction (operational guidance);
- evaluate the current status of training and the needs of specific audiences;
- determine prescription training on the minimum requirement;
- gather preliminary information on resources available and conduct a time estimate;
- issue a warning order and preliminary taskings;
- conduct a reconnaissance and training estimate;
- commence preparations and concurrent preliminary training;
- eliminate optional training activities;
- establish the criteria to measure success;
- develop a plan and issue exercise directives and orders;
- initiate concurrent reconnaissance, planning and orders at subordinate levels;
- conduct training co-ordination conferences and administrative co-ordination conferences;
- conduct simulation exercises for higher levels;
- carry out inspections, rehearsals, evaluations and feedback;
- visit subordinate levels to confirm preparations;
- make adjustments as required;
- issue confirmatory orders;
- deploy and conduct the training;
- act upon continuous feedback;
- initiate after-action reviews from the bottom up; and,
- · take corrective action.

Such training battle procedure is a vital part of training design, in that it ensures efficiency, economy of effort and thorough co-ordination, plus it exercises one of the most important qualities of operationally effective units — good battle procedure, no matter the task at hand. Sound training in battle procedure also ensures that those who need the time the most, the individual soldiers and section/platoon commanders, are not robbed of the time they need for preparation.

Eliminate the least effective training activities. There will always be a shortage of resources, and of these, time will probably be the most critical. It takes a wise commander to judge the most important training activity and a shrewd one to eliminate the least effective. Having completed the training estimate a conscious effort must be made on concentrating resources and economizing in effort—such that the critical requirements are met.



PART 4 GUIDELINES TO TRAINING

"Training is a great art; there are principles of training just as there are principles of war." 8

- Montgomery



Field Marshall Bernard Montgomery

One cannot and should not lay down all of the details of how training is to be developed and conducted. Commanders at all levels have the responsibility to ensure that their subordinates know the parameters within which they may manoeuvre. The commanders should provide the fundamental principles, which will ensure focus, continuity and synergy, while offering flexibility and encouraging initiative. The following are some training guidelines for Commanding Officers, which I believe, are fundamental and worthy of note:

Guidelines to Training

- Set the Goals, Don't Set Out All the Details
- · Permit Freedom of Action
- · Delegate Authority and Responsibility
- · Encourage Initiative, Imagination and Ingenuity
- · Go For The Centre of Gravity
- One Common and High Standard
- Only Practice Can Make Perfect
- · Set Tactical Scenarios
- · Include the Other Arms and Services
- Use Outsiders to Assist in Training
- Leaders Should Be Capable in Basics
- Challenge Soldiers
- Teach Subordinates How To Train Others
- · Conduct After-Action Reviews
- Record Lessons Learned and Note the State of Efficiency

SET THE GOALS, DON'T SET OUT ALL THE DETAILS

Without producing a lot of paper, commanders at all levels should:

- articulate a vision of the ultimate purpose of the training;
- express the intent and concept of training;
- establish clear objectives and priorities;
- ensure objectives are realistic and achievable;
- permit subordinates flexibility to achieve the objectives (and beyond); and,
- acknowledge and reward success.

PERMIT FREEDOM OF ACTION

Having set the scene and established the training goals and objectives to achieve specific goals or to overcome specific weakness, COs should allow subordinates some freedom in how they achieve their goals. This applies at all levels of command thus developing and reinforcing subordinates' leadership skills and confidence. Encourage and reward innovation, as long as sound results are achieved. Innovation and initiative will carry the day in operations, so make a conscious effort to develop these qualities in training. But challenge innovators and if necessary, push them.

DELEGATE AUTHORITY AND RESPONSIBILITY

"I am a believer in telling a man what I want done, but not how to do it. If an officer has doubts as to the best method of doing the task, I am glad to render him any assistance within my capabilities."

- General Frank Worthington, Pacific Coast Area "Instructions to Officers" 1945 ⁹

nates, especially lieutenants, captains and warrant

Permit subordinates and their subordi-



Colonel Worthington - Experimenting with manoeuver warfare, 1938

officers to create, organize and run training. They must be allowed to develop as leaders and must be given the opportunity to learn from their successes and mistakes. Of course, once given this opportunity and the necessary resources, subordinates will be expected to produce good results and should be held accountable for their decisions and the attainment of standards. Care must be exercised in supervising inexperienced leaders to ensure that, while given latitude to make mistakes, soldiers do not suffer and false lessons are not taught. Ultimate responsibility to produce well-trained units cannot be delegated. He who has the guide-

lines, is given the resources and oversees the training, is accountable.

ENCOURAGE INITIATIVE, IMAGINATION AND INGENUITY

One of those willing to face the facts (that the Germans were winning because of superior tactics, and not blaming equipment or Allies) is a professional soldier Lt-Col Frank Worthington ... fired up by stories filtering back across the Atlantic about lightning strikes of German columns, he decides to arrange an unusual experiment with a mobile column charging around the rural countryside of Western Ontario ... a mobile column led by one company of medium tanks, followed by infantry in trucks, and field guns on wheels bringing up the rear. ¹⁰

- George Blackburn Where the Hell Are the Guns

As a young captain, along with several other officers, I was encouraged by my battery commander to create new doctrine for the tactical employment of self-propelled M109 Howitzers, which had yet to come into service. Using tracked ammunition carriers to simulate the self-propelled howitzers, we created concepts of "Rolling RVs", pre-surveyed crash deployment gun positions and alternates, and the passage of abbreviated firing orders over the radio on the move—ideas which are now (some 30 years later) beginning to be employed by the U.S. artillery with their on-board computers, position indicators and secure radios. The battery commander challenged us, he made us think about our profession and he caused us to challenge not only "the book" but our NCOs and soldiers as well. Another example is the tremendous work another battery commander did to develop and implement innovative tactical doctrine on the integration of the fire of guns and mortars - "Integrated Indirect Fire Support." We brought the training of the brigade's infantry mortars up to new and higher standards, but more importantly, we synchronized the guns and mortars to provide greatly improved fire support for the brigade. Innovation and the evolution of doctrine and tactics must be encouraged by commanders. Generate intellectual curiosity and ingenuity.

GO FOR THE CENTRE OF GRAVITY

"If sub-unit (company, platoon, section) training is not good you will fail in battle, however good your higher training."

- Montgomery

As Von Clausewitz has said, the centre of gravity is the hub of all power and movement, on which everything depends. It is the point against which all our energies should be directed. In collective training for the Canadian Army I believe that the centre of gravity is the combat team. Combat teams, not companies/squadrons/batteries, are the sub-units that make up battle

groups. Combat teams are the level at which the firepower, manoeuvre and tactical agility best come together, and the combat team becomes the major building block of battle group. Any number of combat teams can come under the command of experienced COs, who themselves have previously commanded combat teams and who now have the responsibility of coordinating all of the combat functions while managing significant resources. With the combat team as the centre of gravity, then all of our training should focus on ensuring that combat teams are well trained, evaluated and prepared for operations.

In the British, German, and U.S. Armies, the emphasis is at B.G. level, as seen in Suffield, Shilo and the U.S. National Training Centres. However, given the particular circumstance facing Canada the combat team would be the level at which we could best muster resources for first-class training - but this would have to change in training for war.

The centre of gravity for Militia training in peacetime, for many reasons, would be the platoon level. This is the largest cohesive team which commanders should expect to find trained to a high degree of proficiency in the greatest number of battle task standards. In preparation for operations though, it would be the combat team.

Concentrating energies on assuring that the centre of gravity is mastered does not preclude other training when resources and opportunities permit. In fact annual battle group training in specified battle task standards is tremendously important and higher formation training on a regular basis is fundamental to maintaining a professional focus. But the greatest energy should be focussed on well-trained and highly proficient combat teams.

If we don't focus on a centre of gravity we are never going to achieve significant success and keep the profession alive and focussed.

Note: These previous five bullets sound a lot like Auftragstaktik, or the 'mission- oriented command system' of the tradition of Scharnhorst and Moltke. Successful armies do not turn their troops into automatons nor try to control them from the top, instead they allow considerable latitude, focussed on the far-reaching object. A prerequisite for employing auftragstaktik, of course, is that subordinates must be well trained with a sound understanding of the appropriate doctrine. If we practice Auftragstaktik in training we will be more likely to employ it in operations.

ONE COMMON AND HIGH STANDARD

Battle task standards are covered elsewhere, and of course one needs to know what is expected of them before setting out on their training. However, across the Army, amongst all soldiers irrespective of their trade, unit or specific employment there should be one common and high standard expected, especially in subjects such as:

• preparing defensive positions;

- · siting personal and support weapons;
- · patrolling;
- section and platoon attacks;
- · convoy protection.

These subjects should be covered in all units before progressing to the functional tasks of the unit, and they should be common to all junior NCOs and junior officers, no matter their trade or classification. Individual training standards are required, but what I am suggesting here deals with teams, sections, troops, platoons and company equivalents across the Army.

ONLY PRACTICE CAN MAKE PERFECT

It is only through practice that commanders and their soldiers will achieve a high degree of professionalism and soldiering skill. The study of history books and doctrine manuals, together with participation in war games, simulations and TEWTs develops professional competence up to a point. But only putting the theory into practice during training in the field provides the realism and the imponderables which lead to analysis, innovation and learning. Field training exercises, irrespective of cost or effort demanded, are essential to good training. One cannot learn how to fight in war on game boards or from books. Even just learning how much terrain a combat team needs to manoeuvre or how fast it can move can only be learned by doing. The Combat Team Commanders Course has always offered opportunities to practice with the complete Combat Team—and this must be retained.

- "What we have to learn to do, we learn by doing."
- -Aristotle



"Only practice can make perfect."

SET TACTICAL SCENARIOS

For realistic collective training, commanders must establish a tactical scenario, in which there is the presence of other arms and services and higher levels of command. An exercise for the sake of an exercise or a battle run

without the broader context is not particularly inspiring. Commanders should not, however, waste a lot of maps and paper on unnecessarily elaborate scenarios that officers do not read and soldiers do not care about. We have all seen the waste of paper in elaborate TEWTs and CPXs which ended up shelved to collect dust. Without a tactical scenario exercises are meaningless. Besides, just painting the picture is a good mental exercise for officers.

INCLUDE THE OTHER ARMS AND SERVICES

As often as possible, affiliated arms and services should be incorporated into all levels of training, particularly when training officers and NCOs. If possible, permit soldiers from the other arms and services to fill unit positions during exercises. No battles are won without the synergy of the all-arms team. Units that train together, strike up affiliations and friendships and iron out standard operating procedures together will function better as all-arms teams under the stresses and pressures of operations. Additionally, the more we all learn from each other, the better we can employ each others' combat and support functions, and the greater flexibility we have in preparing our people for any contingencies. As the nature of warfare evolves the clear lines of demarcation between arms, regiments, specialties, etc, will blur, so there is an imperative to learn about each other now that the time is available.



The synergy of the all-arms team.

This paragraph from Lieutenant-General Sir Francis Tuker's book "Approach to Battle," commenting on the Eighth Army in North Africa, is worthy of note:

"But this was the first time in war that we British had the chance, and failed, to train our battalions and our armoured squadrons and artillery batteries, our infantry sections or platoons and our single tanks or pairs or troops of tanks and our sections of field and anti-tank artillery, to work closely together right up in front in aggressive, mobile infiltrations. Whatever form our arms may yet take, they must be trained closely together in peace, from the very smallest sub-unit up to the very largest. Never again must they drift apart and never again must any of them - or for that matter, any of the three Fighting Services - become a 'sacred cow'."

Certainly in the 1960s in Germany, with some very impressive and capable battery commanders, many of us spent almost as much time with the infantry as with our own troops and to this day I still have many friends in the RCR, believe it or not.

USE OUTSIDERS TO ASSIST IN TRAINING

It can be helpful to have outside teams (e.g., from other units/companies, school representatives, HQ staffs, etc) assist commanders in evaluating training and providing objective critiques. The outsiders must, however, be made well aware that they are working *for* the CO or commander and *with* the unit. It would be absolutely counter-productive for these opportunities to become adversarial or self-serving in character.

The Instructor-In-Gunnery, or IG, system in the artillery has proven most effective over the years. An IG Team is deployed to assist unit COs, pass on the latest doctrine and drills, ensure common standards and report (principally to the CO, but also to the school, branch director and brigade commander) on the technical and tactical state of the unit. On several occasions as a young captain I led an IG team to a unit, and twice after reporting directly to the CO I had to stop it from conducting what I considered unsafe practices. The trust and confidence was there to accept my judgement and the training benefitted accordingly. Years later as a CO, I always had IG assistance during practice camps and found it most beneficial. Outsiders were invaluable to assist me in training my unit and I believe that this should be a common and widespread practice throughout the Army.

LEADERS SHOULD BE CAPABLE IN BASICS

Every now and then, COs should put their officers through the ropes as soldiers to confirm that they really do understand what is expected of the troops. This can be done during competitions, exercises, sports days or more formal annual tests for officers. I have seen this done in unit orientation courses and on inspections. Such mixing it up with the soldiers during training builds understanding, mutual respect and trust. RSMs should do the same with Senior NCOs. If officers and NCOs cannot



Leaders should also be capable of the basics.

do the basics, the troops will know it and their credibility will suffer accordingly.

It is vital for the Army to have a high and common standard for the basic skills, which serves as a start point for all soldiers.

CHALLENGE SOLDIERS

Teach your soldiers that they can do a lot more than they think. Soldiers enjoy a challenge and they will always enjoy challenging others. It is the will to endure and will to win which carries soldiers through the tough situations they will face in operations and war. If they don't experience a significant physical and mental challenge in training they will not know their own capabilities when faced with stressful situations. Confidence and pride come from taking on and conquering challenges, and these are essential qualities of good soldiers. As Churchill said: "Never give in! Never give in!



Challenge soldiers

Never, never, never." Stalwart soldiers, who have been challenged in training will not give in when they are tested with the harsh realities of war or the mental challenges of keeping the peace.

TEACH SUBORDINATES HOW TO TRAIN OTHERS

Spend some thought and energy on the subject of How to Train - or, train the trainers. Not all officers, WOs and NCOs know how to train soldiers. They may be able to do their job as commanders and leaders, but they can learn a lot about how to best train their troops. It is likely that they will only know what they have seen in their own unit, and therefore repeat the bad lessons along with the good. COs should include professional development sessions within their training plans to address the "Training the Trainer" problem. Training must progress beyond the typically unthinking repetition of past experiences. SALY and SALT (same-as-last-year and same-as-last-time) are expressions which should be banished forever from the training lexicon.

"It is the exception to find a commander who teaches his subordinates how to train troops. ... very few know anything about it and a great deal of time is wasted in consequence." ¹²

- Montgomery

It would seem to me that there should be some sort of course or a significant section in existing courses for officers and NCOs to learn how to train. Perhaps this could be done by distance learning, but my sense is that there needs to be some mentoring. So, perhaps a combination of distance learning and instruction within the brigades/units should be employed. Or, perhaps training would be an appropriate subject for army professional development studies. Certainly the training "lessons learned" should be disseminated on CD-ROM,

and these should get to all officers and NCOs.

CONDUCT AFTER-ACTION REVIEWS

Immediately upon completing a training activity the officers and NCOs should conduct "after-action reviews" with the soldiers - beginning with teams, sections and platoons, then with commanders at subsequent higher levels. Some would call it a "Hot Wash" (immediate wash-up). The aim is to encourage dialogue so that all members of the organization being exercised examine their participation in the training event and so that they learn the most appropriate lessons in an open and frank exposé. An aide-memoire on some of the key components of the after-action review process may be found at Appendix 2. I would suggest that this is one of the greatest deficiencies in training that I have noticed—we are not good at After-Action Reviews. We are most reluctant to reflect, share ideas, look for the source of the problem and then take remedial action. We seem to not want to embarrass anyone — so consequently we lose many learning opportunities.

RECORD LESSONS LEARNED AND NOTE THE STATE OF EFFICIENCY

It is important that all officers and NCOs periodically reflect on activities and make note of the tactical and the training lessons learned. Record the post-operation and post-exercise lessons. Be brief and to the point - but candid and direct. It is human nature that a one-page summary that can be placed in a notebook is far more likely to engage the mind than a bulky or excessively long post-exercise report. Brigade commanders might wish to review these reports as a means of validating unit training plans as well as providing information to discuss with the CO. It was the historical studies of the German General Staff, which led them to conclude that the mobility of tanks and tractors to create fast moving motorized infantry units would be the key to success in any future war. They studied, practised and perfected these concepts with the limited resources they had at hand, and in the "blitzkrieg" tactics of World War Two we saw the impressive results of such a "learning organization."

"... the 'Current Reports from Overseas' indicate, the army (British Army, 1942-43) in the Middle East understood what the Germans were doing, but the links within the army's chain of command were not there. ... no common doctrinal centre in the army ... no consistent battle doctrine ... no means of ensuring that the many decentralized training programs reflected similar approaches." ¹³

- Millet and Murray British Military Effectiveness in the Second World War



PART 5 PRINCIPLES OF TRAINING PROGRESSION

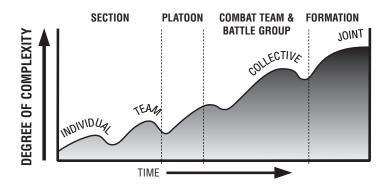
PRINCIPLES OF TRAINING PROGRESSION

- · Rhythm and Tempo
- Training Must Be Progressive and Continuous
- Learn Through Repetition
- Individual Training Must Precede Collective Training
- Set Aside Dedicated Training Periods
- Don't Use Soldiers as Training Aids
- Confirm Training at Stages
- · Prepare for the Future

RHYTHM AND TEMPO

Training needs a focus and goals. Usually the best way to achieve training objectives is through a rhythm and tempo, which are progressive, cumulative and continuous. The following are some principles of training progression, which COs should incorporate in their unit training plans. A model of training progression for a unit is provided at Appendix 3.

FIGURE 4. RHYTHM AND TEMPO OF TRAINING



TRAINING MUST BE PROGRESSIVE AND CONTINUOUS

This principle applies equally to both individual and collective training. Individuals or small groups cannot effectively train at higher levels of sophistication unless they have mastered the basics. Therefore, COs should structure training so that it progresses from the smallest elements (individuals, then teams, then sections, then platoons, then companies, etc.) until training is

expanded to include other arms and services. If a unit tries leaping into complex training situations prematurely then wrong lessons will most assuredly be learned. As well, valuable training time and resources will be lost, and this wastage will be compounded in the long term.

Continuity in training also requires vigilance. Just because a unit has achieved an individual or collective training standard at one particular point in time does not mean that this type of training is over. Like professional athletes, soldiers (and teams) must prove themselves repeatedly in practices leading up to game day.

Ideally, continuous training builds on previous strengths, preferably over a two- or three-year cycle. Every year should develop and exploit the previous year's training: hence foresight, vision, continuity of plans and responsible hand-off from one commander to the next are required.

LEARN THROUGH REPETITION

People and teams learn from previous experiences, but it doesn't always stay with them. Additionally, they may begin slowly or awkwardly, but improve with practice. To quote Major-General R.I. Stewart (Retired): "Drills and procedures acquired by repetitive training allow soldiers to survive under fire and achieve their objectives. In the heat of combat there is little place for deep philosophical thought or the development of new, novel and complicated tactics — basic drills that take place without long and detailed discussion and explanation will be all that is possible. NCOs are not philosophers or deep thinkers but people of action and directness. A good unit is one that has NCOs who when faced with a tough situation get off their asses and do what has to be done. They achieve this by carrying out the drills they have been taught and that they taught to their troops."

Repetition in training will ensure:

- a certain aspect is mastered;
- that the skill or drill is employed in subsequent training; and
- that the appropriate response becomes natural under fire.

Performing the important skills just once a year, on a refresher basis, is not enough. Repetition in training is essential, but not at the expense of boring the troops to tears. Figure out what is essential, find ways to deal with the weaknesses and push the more progressive individuals and teams to their upper limits. Correct faults as they occur, for with repetition a fault repeated will become the accepted standard.

Leaders should not shy away from repetition for fear that it could be boring. The real challenge is to design imaginative training and training events so that the repetition is invisible to the participants. Create a satisfying challenge which will reinforce the positive lessons intended.

INDIVIDUAL TRAINING MUST PRECEDE COLLECTIVE TRAINING



Individual training - Grenade Throwing, Shilo, 1962

The success of each period of collective training will depend largely on the care and attention devoted to the individual training, which precedes it. Individual training must be conducted and verified to maximize training value of follow-on collective training situations. The concept of a Warrior Program is a good means by which individuals can be refreshed annually on some aspects of basic individual training, but additionally basic and trades courses, as well as individual competencies (e.g. small arms qualification) must be completed before progressing to collective (i.e. team, section and sub-unit) training.



Team Training

SET ASIDE DEDICATED TRAINING PERIODS

As much as possible, COs must do their best to get sub-units up to their full complement, at least for limited periods, so that they can properly conduct collective training. Three weeks in the field with personnel routinely returning to garrison or constantly "changing around" is not as productive as one solid week with a full complement of officers, WOs, NCOs and soldiers. It is unnecessarily challenging to try to build a team while its members are in different places doing different things and the level of competence is not measurable. Additionally soldiers are left with incorrect perceptions about time, space and tactics. However, if one is left with no choice but to train at half strength, then one must do so - and allow subordinates to take on greater responsibility. They should all be trained "two up" anyway, so give them a chance to show their talent and skill.

DON'T USE SOLDIERS AS TRAINING AIDS

There is no greater waste of a soldiers time than to be deployed in the field while the officers bumble about, fully unprepared to take the reins and

command the training activity. Also, there is nothing more frustrating for a soldier than to have to repeat the training over and over until the officers finally get it right. COs should run TEWTs, CPXs, chalk talks, cloth model exercises, simulation exercises and syndicate discussions so that the leaders are sorted out before the soldiers are required to get cold, wet, tired and hungry. Of course, while the officers are off learning their job, concurrent activity and training can and should occur. In doing so, one makes the best use of time available but also gives the NCOs an opportunity to grab the reins and assume some responsibility for the training of subordinates.



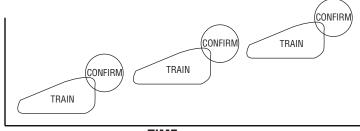
The progression of training.

CONFIRM TRAINING AT STAGES

At all levels in the unit, (individual, team, section, platoon, company) confirm that all training objectives have been achieved before pushing on. This requires the personal attention of sub-unit and unit commanders. Do not begin a unit level exercise without clearly establishing that sub-units are ready to progress to advanced training. This requires a measure of evaluation. The most reliable method commanders have to evaluate training is to see for themselves the level of competence achieved at the sub-unit level. For example, COs need to visit, observe and get engaged in the concluding stages of sub-unit training. Such opportunities should be built into the training plan. Only after a CO has confirmed that the sub-unit has achieved the desired level of training should it be permitted to progress to the next stage.

FIGURE 5 CONFIRMATION AT STAGES

LEVEL OF TRAINING



TIME

PREPARE FOR THE FUTURE

The doctrine, practices and very existence of the army depends very much on anticipating the future and adjusting accordingly. We have all read of periods of stagnation in policy, doctrine, equipment and mental agility — and armies have historically suffered from such maladies. Commanders at all levels should constantly challenge their subordinates to visualize future warfare and articulate how the army will continue to be relevant and effective. As an example, perhaps the future will see only one branch of combat arms officer, and now (in peacetime) might be a good opportunity to experiment. As another example, are we ready for the Revolution of Military Affairs (RMA)? I suspect not!

For certain the future will demand a better educated officer corps, a system governed through open and transparent dialogue, a willingness to allow experimentation and risk, and a leadership prepared to invest in the physical and intellectual agility of the army.

I would say categorically that we do not challenge our Privates, Corporals and NCOs to their full potentials, and they are the future. I expect that we don't challenge junior officers enough either.



PART 6 TRAINING EVALUATION

TRAINING EVALUATION

- · Battle Task Standards
- Commanders' Evaluation Exercises
- Training Effectiveness Evaluation Assistance
- Umpires and Controllers
- · Publishing and Disseminating Lessons Learned
- · Commanders' Visits
- Inspections as a Training Event
- The Directed Telescope

BATTLE TASK STANDARDS

"DuPuy's experience had taught him that Army training needed to be focussed on the performance of well-defined tasks directly related to performance in combat, ... all it (the training system) lacked was a disciplined approach. ... DuPuy created such a training system. The most important element was standards, without which quality performance is meaningless." ¹³

Sullivan and Harper Hope Is Not A Method

You need some idea of where you are going before you set off on an adventure. Battle Task Standards give you a set of benchmarks to ensure standardization, consistency, and validity in the training plan. These standards have been developed to serve as tools for measuring and comparing the standards of training in a unit against a required or at least desirable standard. They also provide a progressive framework of those tasks that need to be performed during unit training.

Battle Task Standards are a starting point towards more detailed and valid performance measurement and evaluation, and Brigade Commanders and COs should employ them accordingly. The importance of their development and maintenance at army level cannot be over-emphasized.

COMMANDERS' EVALUATION EXERCISES

Periodic evaluation exercises are required at all levels. Battle Task Standards can assist in setting the goals and outside trainers/evaluators can help confirm the degree to which Battle Task Standards have been achieved. In the

final analysis the training needs to be evaluated to confirm the object has been achieved, and it needs to be evaluated by those in command. Commanders must assess the standards achieved by subordinate units against specific training objectives. The contractual agreement between the brigade commander and the CO concerned, or the CO and his subordinate commanders, is a good starting point for these assessments.

TRAINING EFFECTIVENESS EVALUATION ASSISTANCE

COs and commanders periodically need externally provided assessment and evaluation by individuals or teams who are current, objective and oriented toward providing training assistance. Schools and central staffs are best structured to provide this type of support. This requirement is a mandatory precondition for improving doctrine, tactics, SOPs, drills and battle procedure. Schools and central staffs are especially important in collecting, consolidating and rapidly disseminating the lessons learned. Regrettably, this is not done in the Canadian Army except in the artillery, and even there it is left to the individual COs to decide whether to have an assistance team or not. Commanders, branch directors, schools and training/doctrine staffs should receive post-exercise reports and consider the recommendations. There is no way to achieve common and high standards without outside assistance, and commanders and COs should incorporate external assistance teams as a integral part of their training effectiveness assessment.

UMPIRES AND CONTROLLERS

We have pretty much lost the talent and expertise in the field of umpiring and controlling exercises. Perhaps this is because of limited time to plan training on a shortage of people. This has to be revived if we want to bring realism and energy into an exercise, and if we want to exercise a higher degree of accountability. Besides, it may well give desk-bound officers a chance to get out into the field, back into the doctrine and in touch with realty. Umpires and Controllers play a vital role in training delivery and training effectiveness.

PUBLISHING AND DISSEMINATING LESSONS LEARNED

Over the past few decades the Canadian Army has been particularly weak in producing, publishing and adopting lessons learned from training events and from experience in various operations. During World War II the Canadian and British Army "Training Memoranda" put up-to-the-moment lessons learned in the hands of commanders in very little time. The Canadian Army Journal of the fifties and sixties also did so. This was seen as an essential component of training feedback, a necessary step in training refinement, and a vital component of preparing for war.

Today if training demonstrates deficiencies in doctrine, procedures or equipments, then these observations should be recorded and forwarded through the chain of command and to the Army Lessons Learned Centre. Progress cannot be made if commanders at all levels neglect to identify and act upon problems and weaknesses. The brigade commander must foster the importance of activities such as exercise debriefings and ensure that lessons learned are promulgated quickly and with complete candour. The U.S.Army "After Action Review", or AAR process has proven to be most effective within their system. It is our professional obligation to note and take action, avoiding or overcoming the mistakes of past experiences, while training for the future.

COMMANDERS' VISITS

A brigade commander will visit brigade units in training whenever the opportunities arise - which should be often. This is part of his job and responsibility and should be considered a normal component of the broader training evaluation process. In addition to the planned visits, casual visits should happen frequently. Visits should never be without purpose, even the most casual of visit, and there may well be times when a commander is looking for something specific - such as the standard achieved at a particular point in time, especially when units are training for a specific mission.

Whenever possible, commanders should be included in the training, but not as a VIP. Brigade commanders should enjoy soldiering and should not mind getting cold, wet and tired. Spending a day with a section, in a tank, in a gun detachment or on a DP can reveal a lot about a unit, and besides soldiering is fun and it's always good to get back to our roots.

Brigade commanders should expect to receive specific briefings on those exercises involving two or more sub-units of any unit. Perhaps a captain, lieutenant or warrant officer from the unit concerned could give these briefings on behalf of the CO. If only one sub-unit is engaged in training, the brigade training staff may brief the brigade commander, unless the exercise is outside the local training area or is particularly noteworthy because of foreign participation and/or public interest.

During visits to training activities commanders expect good briefings from NCOs and junior officers, to include:

- where they are in the training cycle and the rationale behind the training;
- christening of the ground and outline of the activity;
- the aim and scope of the training;
- the conduct of the training;
- · safety measures;
- lessons learned to that point in the training; and
- remedial or additional training required.

I strongly recommend the study of Montgomery's aide-memoire, "Some General Notes on What to Look for When Visiting a Unit," which can be found at Appendix A to Jack English's "Failure in High Command: The Canadian Army and the Normandy Campaign." I would suggest that those are the very things commanders should be looking for.

INSPECTIONS AS A TRAINING EVENT

"The British General (Montgomery) conducted rigourous inspections of Canadian units, watching exercises and interviewing officers and senior NCOs in infantry battalions." ¹⁴

- Granatstein *The Generals*

Although not training per se, commander's and CO's inspections can and should be used as a training event - but it takes a clever plan so that time is not wasted in unit preparations. The inspecting officer must know in advance what he is looking for (e.g., conduct of battle procedure, functioning of the chain of command, an operational capability), what the indicators are (e.g., passage of information, standardization, sloppy drills, low scores) and how to discover the indicators (e.g., testing, looking, asking). Inspections are meaningful and productive activities for commanders at all levels and can be great training vehicles. Besides, they help inspecting officers to keep in touch with the units and give them the opportunity to talk with many of the troops, especially on a one-on-one or small group basis. As an evaluation tool, inspections are but one more way to see some aspects of the operational capability of a unit.

Once when inspecting a particular sub-unit I simply asked the first soldier of the first troop if he had been inspected recently. When he said no, I confirmed this with the next soldier. With a second negative I moved on to the next troop where the responses were similar. At that, I told the battery commander to tell me when his battery was ready for me to drop by. I wasn't really interested in whether the soldiers had holes in their socks or if their kit had deficiencies. On that inspection I wanted to see about the passage of orders and the efficient use of battle procedure - which were sadly lacking. The officers learned from this experience.

Being inspected by one of my commanders, he asked that my officers put the pneumatic mortar into action. The pneumatic mortar was a simulation device that I didn't even know we had in the quartermaster stores. I learned a thing or two there. Our Colonel Commandant, ever with a cigarette dangling from his mouth, accompanied our Commander and dumped out naphtha gas from one of the lanterns on the QM shelf. What an uncanny knack he had for finding the one that still had gas in it! When he came to the shovels hanging on the wall his comment was "Dull tools for dull tools". Who ever sharpened

their shovel? — unless of course they had fought in Korea and had to use it in earnest. Like I said, valuable lessons can come from cleverly conceived and properly conducted inspections.

In my view, commanders at all levels should always be inspecting and putting things right - that's what officers and NCOs are meant to do.

THE DIRECTED TELESCOPE

Commanders at all levels have the right, necessity and obligation to know what is going on throughout their organization. Montgomery was noted for his 'phantom system' of staff officers strategically placed at subordinate levels, reporting directly back to him. He said: "You will not have time to visit sub-units in the front line; if you want a line on how they are working, send some other officer to get that information for you." Wellington, Napoleon and Patton were all noted for similar ways of learning what was really going on. On the other hand, the extremes were the 'château generals' of the First World War, who were completely out of touch with the front, or alternately those commanders under Westmoreland in Viet Nam who went overboard, constantly interfering with the authority of subordinate commanders.



The "Directed Telescope"

Each commander must find the best way to become and remain informed, in a way that fits his personality and that of his organization. Informal channels, like 'gathering information by walking about', checking with the Regimental Sergeant Majors or Second-in-Command's network, asking the right questions of medical officers and padres or at the family support centre are some of the ways of assuring oneself that the formal feedback one is receiving really does coincide with reality. RSMs are particularly important as they are legitimate eyes and ears for commanders and are usually a good source of what is going on at the lower levels and amongst the soldiers. As a young captain, I shall always remember a shadow under a tree as I made my tour of the battery area during the 'graveyard shift' - about 3:00 A.M. I challenged the shadow only to find the Regimental Sergeant Major, a veteran of World War Two (Military Medal) and on his second of three tours as RSM, just out and about having a look-see. He seemed quite happy with what he saw and no doubt discussed it with the CO.

Commanders must learn about the effectiveness of the training of their subordinate organizations to determine their effectiveness as a whole, and they

need to direct their telescope to assure themselves of the reality of what they see or the info/observations they gather.

"The Best form of welfare for the troops is first-class training.

- Irwin Rommel



PART 7 MAJOR CONSIDERATIONS IN TRAINING



Safety is a command responsibility, not just that of the "Safety Officer".

SAFETY

COs are responsible to take care for the safety of their soldiers. Thus major importance must be attached to designing training which is realistic, challenging, exciting and effective and still safe. There are ways to do things that look exciting, appear dangerous, make lots of noise and smoke — but are thoroughly safe. Safety Officers and Safety NCOs must be properly appointed, trained, briefed and rehearsed before going through exercises, as it is through them that commanders can influence the safety of their troops. I must emphasize though, that the responsibility for safety rests with those in command and not the appointed "safety" staffs.

Brigade commanders and COs must take a personal interest in the safety of their troops. They should review training instructions and orders and subsequently visit training sites to assure themselves, through observation and the occasional focussed question, that there is full compliance with safety instructions. There are numerous instructions, guidelines, regulations and orders on this subject — but, as a first principle, commanders should have their subordinates use common sense — and if there is any doubt whatsoever, suspend the activity. Peacetime training need never risk the lives and limbs of soldiers just to make training seem more exciting or more realistic. That would be irresponsible and probably unlawful.

TRAINING WITH AND OF THE ARMY RESERVES

Although I intended this booklet for both the Regular Force and Reserve audience, much of it just doesn't seem to fit the Reserve Force (the Militia). The differences are such that many of the principles might apply but a lot of the detail doesn't. So, regrettably, this will mostly address the requirements of the Regular Force. Having said that — training with and of the Reserves is a Regular Force responsibility, and both parties must follow the same general doctrine while adhering to the same standards.

Regular Force commanders at all levels have specific responsibilities

for the training of and training with Army Reservists. They respond to and must consider Area training plans and standards, they have specific unit-to-unit branch or corps responsibilities and they have specific missions and tasks for Area Schools and Militia concentrations. Philosophically, commanders should keep in mind the following two stakeholders in Militia training:

- The Government of Canada. The Canadian government deserves and expects the Canadian Army to produce cohesive Militia subunits, which are trained to the appropriate Battle Task Standards. To accomplish this, Militia units, both at Area concentrations and during the annual training cycle, should be provided the maximum support possible; and
- Individual Reservists. Reservists deserve to be offered interesting, challenging, appealing and personally rewarding training, both on an individual and a collective basis. Again this training should be available throughout the year not just at annual concentrations and schools.

The Militia is and should be playing an increasing role in Army operations. We need to reflect on this reality and adapt to a changing Regular/Reserve balance. Regular Force brigade commanders and COs should take every opportunity to incorporate Militia personnel, both as individuals and in formed sub-units, into their training. We should learn to creatively accommodate the inherent challenges while valuing Militia involvement in training and operations. We have all seen Regular Force units welcome, train and integrate up to 30 per cent of their unit strength for operational deployments. Through sound planning, employing common sense and by setting and ensuring high standards those units usually achieve notable success and complete the operation with a high degree of professionalism and pride. Wise COs know how to capitalize on the strengths of Reservists, accommodate their inherent limitations and build cohesive and proficient teams.



Training in a town.

In the absence of a mobilization concept for the Army it is a great challenge to determine the expected training requirements for Reserve units,

other than to try to be like clones of the Regular Force but without the resources, equipment, personnel or collective experience. Resolving this dilemma will be a major undertaking for the Army, but other countries seem to be able to do so. Perhaps part of the solution is to concentrate largely on quality individual training and training up to and including platoon level - with annual experiences in higher level (e.g., battle group) exercises. No matter how difficult, individuals and commanders in the Militia must be exposed to realistic operational training. So, perhaps the aim should be to master platoon-level training and be exposed to company and battle group operations. Then use computer-based training and war gaming to assist Militia leaders to better learn and execute their leadership responsibilities.

Much of the Militia training can take place in and about their communities with the scenarios being modified accordingly. They don't necessarily need all of the equipment, ammunition, range time and consumables that the Regular Force units might require. In fact, if Reservists are needed on short notice they may not get those resources anyway. Instead the Militia must concentrate on leadership, battle procedure, command and control, communications and tactical drills, for example, and train collectively at platoon level. These fundamentals will stand the Militia units in good order no matter what the task assigned might be. I guess what I am saying is that it would be unrealistic to see the Militia as well-equipped and resourced as the Regular Force in peace time, but not having all the bells and whistles should not be an excuse for not doing proper training. The focus and the extent of training, should be adjusted but commanders should not violate the principles, the flow and the doctrinal base.

If the Militia to is to play a meaningful and productive role in the Canadian Army mobilization plan, which it must, it is critical that their training be adequate to the demands of the particular stage of mobilization. In the early stages they obviously need sound individual training, adequate trades training, high quality leadership training, a sound foundation in tactical doctrine and proficient platoons. They can only achieve these levels through training on the armoury floor and in sub-unit tactical exercises. The rank and file must have shared experiences in realistic tactical scenarios, otherwise the unit roles and functions would seem to be out of sync. The officers and NCOs require good training in tactical theory and drills, and need to be evaluated in unit training - mostly through tactical exercises without troops and simulation but also in the field.

At higher stages of mobilization sub-units and units must be trained to take on those tasks within their capabilities. Initially these would be set-piece tasks, but as the requirements increase they would be much more demanding, with better equipment. Some sub-units or units could be re-roled, which amplifies the need to build from a sound foundation.

At the still higher stages of mobilization Militia units would be expected to function tactically within formations, with operational tasks appropriate to the equipments they have - such as light infantry, rear area security,

general support artillery and functional support units.

To achieve any semblance of the above a mobilization plan must give considerable guidance on and direction regarding the subject of training. For Militia training to be viable and effective it must incorporate:

- adequate and predictable funding for individual, mission-specific and collective training;
- sufficient training days for individual, specialty and collective training;
- an adequate proportion of Regular Force and full-time Reservist personnel to prepare and run the training;
- training equipment suitable in quality and quantity to the tasks assigned, and located in close proximity to the armoury;
- periodic access to training facilities and training areas;
- simulation and distance learning capabilities for teaching skills, for practising on weapons, and for teaching tactics and command and control;
- realistic (for the stage of mobilization/expectations) and measurable
- standards for individual, specialty and collective training;
- · evaluation and feedback.

More than anything, effective and useful Militia training must be connected to the army mobilization concept, and must incorporate the guidance and resources appropriate for that which is expected. The military clearly needs meaningful roles, missions and tasks, along with the requisite equipment for training.

REALISM

Unfortunately, or fortunately, war cannot be replicated - but our training can and should incorporate realistic scenarios, realistic environments and realistic incidents, as close as we can while still being safe and bringing out the desired lessons. Simulated fire, casualties, enemy forces, noises, flashes and bangs are within the art of the possible these days. However fear, courage, determination, human strengths and frailties and the full spectrum of emotions will never reveal themselves in training. Commanders must keep this in mind when they draw conclusions about tactics, procedures, equipments or even people in training. Training will always be at least one dimension shy of battle.



Realism in training

LIVE FIRE IN TRAINING

It may seem a bit curious to the reader that I would leave the subject of live fire so late in the discussion. I firmly believe that live fire exercises with service ammunition are an essential component of training; but not nearly to the extent we have employed them in the past. My experience has been that live fire opportunities can be put to much better use. It seems logical that if we know what we want to achieve and we know what standards are expected, then we should be able to determine the requirements and use the ammunition efficiently and effectively. Frequently better training in drills, tactics, camouflage and manoeuvre can be achieved with much less ammunition than in the past, and certainly with advanced weapons simulation and improved training technologies this will be all the more so in the future. Still, there is a great deal to be gained by soldiers participating in well-structured field firing exercises.

Clearly, all individuals must be proficient with their personal and crew-served weapons and the annual requirements for this can be easily determined. Additionally all ranks should be familiar with the complete arsenal of unit weapons which might be available to them and familiarization live fire must be undertaken. Section, platoon and company-level live fire exercises according to the specified battle task standards are also essential on an annual basis (and the same applies to tank squadrons and artillery batteries as well as combat teams) but only as a culmination to all the other preparatory activities. Regimental, i.e., unit, live fire is needed by the artillery for that is the level at which the artillery begins to fight, but mastering combat team live fire is as high as one might expect for armour and infantry. Establish bona fide requirements, then provide the resources.



Live fire exercises are essential at least annually.

Training for specific operations measured against accepted and well-understood standards will normally demand a specific ammunition allocation. Training staffs should have appropriate scales on hand for such eventualities and the allocations should be automatic and additional to the routine annual scales. We have all seen the two extremes, i.e., units unable to train for a mission because they haven't been given the spending authorities, and units pump-

ing thousands of rounds down range (and millions of dollars) for a mission in which the aim is to not fire a single round in anger! These are important command (not staff) decisions, requiring rigourous estimates and plans.

TRAINING FOR UN AND OTHER SPECIFIC MISSIONS

Specific-to-mission or specific-to-theatre operations (such as operations other than war and domestic operations) require special attention to the training and the evaluation of committed units. Even though the focus of Army training should be on warfighting, this should not be the only training given to units in preparation for peace support or other non-traditional missions. Yet one must



Peace keeping requires special attention to training

keep in mind that if a unit has no warfighting capability it will not be respected by either its allied forces or the protagonists. Train high to deal with the unforseen.

Commanders at all levels must:

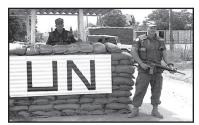
- ensure that guidance and intelligence received from higher headquarters is translated into specific training requirements and objectives;
- support the concurrent battle procedure for deployment;
- clearly outline conditions by which the unit will be evaluated as being prepared for deployment; and
- oversee the requisite for training.

See Appendix 4, which depicts a model of training progression for a specific operational mission.

Much has been written about UN training in the recent past. There is a sense that the Army continues to do everything in an ad hoc manner and thus make do, relying almost entirely on "general-purpose/multi-purpose combat training" as the principal way to train for any operation. From a broad perspec-

tive and under most conditions this concept suffices, but specific-to-theatre and specific-to-mission training is also required. The Army should create standardized training plans with appropriate scenarios and make these essential for unit preparation.

Additionally, expert training teams should be constituted to assist in developing, conducting and evaluating specific-to-mission training. Such measures would undoubted-



Specific-to-mission training is essential for operational taskings.

ly assist in ensuring common doctrine and practices while improving our ability to learn from others.

Of course training should not end when the troops get on the bus, train or plane. There are numerous historical examples of continuing and continuous training of troops in-theatre in war. It was noted in World War Two - "When German units were not in the line, they trained long and hard". There must be continuous learning, adaptation, modification, adjustment and re-training once in theatre. Other, less mission-specific types of training should also continue whenever opportunities permit - e.g., trade/MOC courses, R.O.E. Refreshers, First Aid, new skills, etc. Commanders at all levels should ensure the creation of a continuous learning atmosphere to relieve boredom, maintain proficiency, encourage self-development and improve operational efficiency.

I recommend that you read the LaRose-Edwards, Dangerfield, Weckes Study on "Non-traditional Military Training for Canadian Peacekeepers," produced for the Somalia Inquiry.

HIGHER LEVEL DOCTRINE AND PROFESSIONAL DEVELOPMENT

"In April 1941 he (Brooke, British CIGS) recorded he was 'depressed at the standard of training and efficiency of Canadian Divisional and Brigade Commanders. A great pity to see such excellent material as the Canadian men controlled by such indifferent commanders'." ¹⁷

- Granatstein *The Generals*

Obviously there are limited opportunities for the examination and experience of higher level doctrine for Senior and General officers of the Canadian Army. Walking the ground and discussing tactics, like the studies/ reconnaissances in Norway and battlefield studies of Normandy and the Gothic Line are examples of relating current doctrine to ground and also learning from our predecessors. Immediately after the Second World War the British Imperial Defence College did battlefield tours of major Canadian battles of the War (e.g. Operation TOTALIZE), however we chose not to do the same until several generations later. The Gulf War, Oka and even Bosnia and Somalia have yet to be studied in detail by Army Generals. Additionally, the voluminous afteraction reports produced these days are not particularly instructive as they tend to report in excessive detail, conflicting opinions and just generally miss the point. It is tremendously important that the senior officers of the Army take time to reflect on their profession, thereby maintaining a body of knowledge at the higher level of operations. It is equally important that they pass on their thoughts to the next generation in a free exchange of ideas.

Participating in major operational studies, battlefield tours, field exercises and CPXs of our allies would also be instructive, but only if approached from the view of maintaining our professional knowledge, which would entail

documenting and bringing back lessons to include in the doctrine and/or the writing of professional papers. Everyone should document their experiences, especially senior officers.

"Lack of operational focus further hastened the eclipse of Canadian military professionalism between the wars. Instead of retrenching anywhere near realistically as had the Reichsheer of von Seeckt, which stressed theoretical training for war, the Canadian regular force ... catered to politicians who, as blind as their electorates, could not envision another conflict. ... Institutionally, there was no provision for keeping the art of war fighting alive." 18

- Lt-Col John English Failure in High Command

COLLECTIVE TRAINING AT BRIGADE AND HIGHER LEVELS

Collective training at brigade level and above is absolutely essential and must be conducted on a regular basis, at least annually. Joint and combined training is also required to develop and maintain the necessary capabilities of higher formation headquarters to co-ordinate and utilize the capabilities of support arms as well as the other services and environments and other nations. Although not the focus of this booklet, brigade group and higher level

training, as well as joint and combined training, are fundamental to the professional development of officers, warrant officers and NCOs. They are also fundamental to inter-operability with our allies.

Orchestrating experiences in higher level training is important. All too often it is begun before units and brigades have mastered the basics of their profession - the specified battle task standards.



Field concentrations are essential.

This is normally a costly and counter-productive error. Before launching into higher level training commanders should reflect and consider how the general principles set out in this booklet can be utilized at all levels of training.

At the formation level it takes a most skillfully planned and executed field exercise to challenge and benefit all echelons, including the soldiers, at the same time and all of the time. In fact I don't believe it can be done effectively. Much as this might be an ideal intent, commanders really have to focus on what they intend to achieve while not wasting the soldiers' time and all the associated expense.

CONCENTRATIONS

Concentrations such as the RENDEZVOUS (RV) series of exercises

are critical to the operational effectiveness of the Army, just as ships going to sea and airplanes flying are to the Navy and Air Force. A Divisional-level exercise is required every two to three years, with brigades being exercised by an outside authority at least every second year. Eight to ten weeks, as we used to do, may not be necessary if preliminary training is more thorough and more seriously evaluated. Certainly the old philosophy of moving the garrison to the field is no longer acceptable. I even remember running a mess dinner in the field, thinking that was a clever thing to do! Which it wasn't.



All arms and services must train together.

Concentrate we must. Focus. Get the job done and get home. But while you are there be sure that you get the job done. The culmination of one Rendezvous exercise was a brigade attack against the other brigade. Although it was a great event and almost every sub-component of the brigades were simultaneously engaged in fighting, the co-ordination, synchronization and effective application of force left much to be desired. If our aim really was to

exercise the brigades we should have gone back to the respective lines of departure and started again - but then again the trains were booked to take us home the next day.

My point is, concentrate when appropriate, then use the opportunity to its fullest.

Militia concentrations have had very mixed results in past years, primarily because the purpose and the realities were



Exercise RENDEZVOUS, 1983.

not fully examined in the planning stage. Pretending to run Militia brigade-level exercises by manoeuvring battalions around, has produced few good results. Some company-level concentrations, where each company, battery and squadron went through modified battle task standards, have been much more productive. Perhaps that is the best level at which we might expect a degree of cohesion and where special-to-arm activities can be consolidated — and where a sense of accomplishment can be achieved — i.e., good platoons in a company scenario.

Still, the psychological impact of pulling all of the companies togeth-

er, all the units together and all the arms and services together — and running a large-scale final tactical event is great for the Militia soldiers and officers. It helps to give them a clear, visible and memorable reminder of the purpose of the Army is all about. Perhaps some of this can be achieved through the participation of Militia sub-units and key commanders in the Regular Force formation exercises.

My main point is that the aim, the desirable/achievable objectives, the level of supporting effort and the degree of preliminary training must all be thoroughly considered before a major concentration is planned. Don't just concentrate for the sake of seeing large numbers of troops in the field: that's a waste of time and resources.

A NATIONAL TRAINING CENTRE

A national training centre with state-of-the-art simulation, and training

teams equipped with a full complement of modern, operational, war-fighting equipment is absolutely necessary for the maintenance of a war fighting capability in the Canadian Army. Each combat team in the Army should rotate through such a centre once every two years and perhaps three or four battle group headquarters could rotate through annually.

Some say that we should have had a national training centre for several years, and others might suggest that three ad hoc training facilities would be better. Given the high level of commitment to operations other than war and to domestic operations, as well as the limitations inherent in our operational equipments, and the low experience levels and inadequacy of training resources in



Simulation is no longer an option. It is vital to effective training.

the brigades, the only way the Army can maintain a doctrinal base and a reasonable degree of proficiency in combat operations will be through a properly constituted national training centre.

Some of the key features of a national training centre include the existence of:

- · a centre of expertise;
- a complete set of current operational kit;
- an opportunity to get away from day-to-day commitments;
- common and high standards;
- training realism and stress;
- a professional umpire and enemy force;
- simplified maintenance and logistics;
- continuous feedback on the state of training and leadership;
- continuous feedback on doctrine, weapons and equipment; and,
- an objective evaluation tool.

Would such a training centre take away some of the authority and responsibility from commanders? Not necessarily, and only if they allowed it. In fact it would give commanders more opportunity to dedicate their energies to the essentials of training and not spend so much time and effort in organizing ad hoc arrangements. Would the costs in terms of personnel and equipment be exorbitant? Not likely, in comparison to the costs of maintaining dispersed and mixed fleets of operational equipments. Certainly the two national training centres in Canada — British and German — provide exceptional training opportunities for foreign units and battle groups. We should have our own.

PATROLLING AS A TRAINING ACTIVITY

Perhaps no training activity is as effective in training sub-units and junior leaders as is patrolling. All arms and services will be called upon to patrol in virtually all types of military environment - e.g., civil assistance, aid of civil power, peacekeeping, rear area security, local defence and warfighting, and in all types of weather and terrain. Reconnaissance patrols and fighting patrols particularly contain all the essentials of battle procedure and provide a focus for Non-commissioned and Junior Officers far more concentrated than any other activity. They demand careful planning, coordinated effort, all-arms cooperation, skillful execution and team effort. They serve particularly well as vehicles for leadership training at section and platoon level - where every decision and action of the leader is totally transparent through the consequences, making it ideally suited to the after-action review process. They are good for individual fieldcraft, competitive spirit, sub-unit morale and as an example for the basics of higher level operations. For these and other reasons patrolling is a highly flexible, versatile and demanding activity to be exploited for its training value.

Training in the many aspects of patrolling can be conducted in urban or rural environments, peace support or war scenarios, with or without sophisticated simulation, for short periods or long, while mounted or foot-borne, with low levels of activity or high, with meagre resources or abundant, and with small (2-3 person) or large (platoon/platoon plus other arms) teams. Patrolling exercises can be relatively easy to organize (at least the simple ones are) and they do not normally call for a great amount of resources.

Some people enjoy conducting "Entebbe-type" raids (e.g., company size) as a training activity. I think that the dedication and expenditure of so many resources to such a brief and rare activity in training value, especially in comparison to the other essential training, is marginal. Other forms of training essential to the coy level are a better use of resources. For specialized units perhaps, but as a normal training activity - no.

As Farley Mowat said in "The Regiment": "During the first three months of 1944 (in the Italy campaign), it was the patrols that carried the heaviest load ... Day by day, night by night they went out. Fighting patrols, recon-

naissance patrols, ambush patrols, standing patrols - there was no end to the patrol duties." Patrolling remains an essential part of military activity: e.g., in Bosnia, Oka, Ice Storm '98, Peggy's Cove or searches for a lost child. All units must train in patrolling and patrol training is a superb training vehicle for greater purposes. But, keep in mind that operations of war do not happen in two or three day packages, so patrol training can give false lessons if not handled carefully.

SPECIAL AND ADVENTURE TRAINING

Training in a variety of weather, terrain and environments is important and should be accounted for in training plans. In principle, commanders should also be supportive of special and adventure training. This support should be conditional upon the proposed training not interfering with the achieving basic competencies in the unit.

There are many obvious advantages to be derived from adventure training. Commanders need to weigh advantages against costs (in terms of lost training time to the primary combat functions). It seems that both the British and German Armies often do much better adventure training in Canada than the Canadian Army does. We can do better and should encourage junior leaders to take full advantage of the opportunities. Special considerations should be applied to adventure training, including the following stipulations: it should take place in Canada, ideally involve an aboriginal community or tie in with the Canadian Rangers, and it should not cost much. Certainly training in Canada should get priority over that conducted in more exotic and expensive locales. Providing numerous good opportunities for corporals and privates should take precedence over spending a lot of money looking after a few prima donnas. I used the following test as a guide: Does it develop leaders? Does it stretch the soldiers - mentally as well as physically? Is it in Canada? Is it modest in terms of cost, i.e. would taxpayers think so? Will the troops enjoy it, and be challenged and encouraged by it? and, (one I always added in because I believe we can and should have much more contact with our First Nations people) does it include Canadian Rangers or aboriginal communities?

If it meets many or most of these criteria, then I would give it priority over biking across Europe in colour-

ful spandex pants.

I do not consider mountain schools and ski schools (to include cross-country) to be adventure training per se, although they can no doubt provide a few moments excitement and panic! They certainly are good for small unit morale, individual fitness, self confidence and learning a speciality. They can



Living in an igloo with a Canadian Ranger patrol Commander

detract from operational training however, and regrettably we don't seem to be very good at employing the techniques learned in subsequent exercises. I would encourage more of the latter, and exploit this speciality training in tactical. Because I really think that these are excellent military activities, which we tend to turn into purely recreational activities rather than military ones. As Canadians we should know how to fight in our own forests, on our mountains and over tundra.

SMALL UNIT EXCHANGES

In the past it seemed that many small unit exchanges were fun but didn't have much of a return. Of necessity, this has to change. Given that we are no longer as closely tied in with the training of our allies in NATO and we don't have the first-rate warfighting equipment that many of our allies have it is all the more critical that we conduct exchanges. If we are to maintain a sense of what it is like to operate within large formations and if we wish to maintain familiarization with other countries' equipments we might need upon mobilization, then it will be through exchanges that we maintain this knowledge. It will also be through exchanges that we keep abreast of doctrine, equipments and procedures, and that we maintain contact with the personalities with whom we might have to serve in operations.

Perhaps battalion-level organizations should get a company-sized small unit exchange every second year and no more. However, such exchanges must be extremely well thought-out to ensure that they produce good training value.

COMPETITIONS

"A leader without a sense of competition is weak and easily overcome by the slightest challenge."

- Attila the Hun

Soldiers are by nature competitive and thankfully so. Units are as well and this is essential to a healthy environment and good morale. Training events such as "Skill-at-Arms" days, "Iron Man" and "Mountain Man" competitions, Patrol Competitions, Small Arms Competitions, biathalons and like events, can provide a healthy spirit of competition and serve as training vehicles. Alternatively, they can also foster ill will and unethical behaviour, and can waste valuable time and resources if not properly devised. Recognize these events for what they are and plan for them very carefully, especially from the perspective of the psychological impact they may have on units and individuals. Are they to be "fun" events? Are they to encourage leadership? Are they to encourage individual stamina and allow an opportunity for Private soldiers to excel? Think these questions through and be sure of the objective before plan-

ning the events. If they are to be fun, then make them so and give out prizes (not unit trophies) which reflect this emphasis. If the purpose is to encourage team spirit or skill with weapons, then make sure the competitions reflect the physical capabilities you are trying to encourage. We want robust soldiers who are physically and mentally tough and who don't give up in adversity - so concentrate on those activities which <u>best</u> produce these qualities.

SPORTS AS A TRAINING ACTIVITY

Sporting events are a part of our history, customs and way of life in the Canadian Army. They should be incorporated in the training plan whenever possible. They sometimes seem to consume more energy



Competitions help develop robust soldiers who are physically and mentally tough.

than desirable - but in the army, you can't do without them. Sports activities build self-confidence, challenge the soldiers, teach leadership, and build unit cohesion. Frequent sub-unit competitions generate more participation, good spirit and enthusiasm than do the more high profile inter-unit events, especially when taskings are as heavy as in today's Army. But, whenever possible, it is great to have inter-unit hockey (first priority), soccer, baseball, rugby, volley-ball and other sports. However, don't force soldiers to participate if they haven't got a hope of winning. The days of specialized teams of professional jocks are gone, and teams made up on the spot can be just as much fun and equally entertaining. Maximum participation should be the guiding rule (as long as you sometimes win).

Fostering fitness and a competitive spirit is important, but do not treat competitions lightly as they can be counter-productive to training and can produce unwanted results. Planned wisely, they enhance training and foster good soldierly spirit and strong unit morale.

"High morale is allied with physical fitness; the soldier cannot be mentally fit for battle unless he is physically fit." 19

- Montgomery

VIPS AND OTHER VISITORS

VIPs will visit units and brigades from time to time - and as much as this might be a pain, such visits are going to happen anyway.



V.I.P.s will visit from time to time.

Rather than run set-piece demonstrations it is preferable that they visit ongoing training. In principle, one should not have to disrupt the training for VIPs. But, commanders will want visits to go well and be interesting and informative for the VIP - so it may be necessary to orchestrate activities accordingly. If commanders at all levels use a bit of imagination they should be able to achieve the aim with a minimum expenditure of additional energy. Brigade commanders should always call for the plan and activities in advance and will normally want to see a rehearsal or at least walk the ground. If a commander is comfortable with a particular unit, he may forego detailed rehearsals, but he should always request briefings in advance and should always get out to walk the ground.

Of course efforts should be made to keep the number of visits to a minimum and if they are senior Canadian officers they don't necessarily need the proverbial 'dog and pony' show. Let them get their feet dirty and mill about with the troops - they will get more out of it, as will the soldiers and junior officers who can show off what they are doing and maybe have a good chat.

THE MEDIA AND THE PUBLIC

"Increasingly, Canadians were becoming tired of King's all-talk, no action approach to the war. Criticism about the Canadian Army's continued inactivity was coming from every quarter now. Newspaper editorials and opposition MPs seized on the growing call for action. 'It seems an awful thing to say,' a senior officer at CMHQ remarked at the time to Colonel Charles Stacey, 'but the people of Canada are calling out for blood'. "²⁰

- BGen & Shelagh Whitaker Dieppe: Tragedy to Triumph

Blood they got, on the beaches of Dieppe. This was not to be the first nor last time that public opinion, influenced by the media, caused the government of the day and/or senior officers to make or condone costly military decisions. Certainly today the power of the media to influence world opinion and cause nations to act is remarkable - and the power over the Canadian Forces is evident daily.

Effective communications with the public is surely the Eleventh Principle of War these days, but we have been slow to recognize it. We surely fumbled it through much of the early and mid-1990s, which indicates that we have been on a shaky foundation for some time.

Media involvement in operations is to be expected, and additionally journalists have a genuine interest in many aspects of training. They should be encouraged to get involved in all types of training, both as participants, i.e., role-playing, thereby contributing to professional development, and also for the purposes of real-life coverage.

Mr. David Pugliese of the Ottawa Citizen has offered the Army, in various speeches and articles, several tips on dealing with the media. One may

detect a sense of frustration in Mr. Pugliese's suggestions, but such attitudes are not confined to him. The reader may not agree with what he has to say, but it would be well worth while paying attention to his opinions for these reflect those of many of the journalists they will have to deal with. One should prepare for this in training. His comments on the Canadian Forces and military-media relations are as follows:

- Number 1 Rule; Do not lie. Or more to the point, do not be evasive when dealing with the media. He gives examples of both "good news" and "bad news" stories where it was like pulling teeth to get just to get the facts, which would become open in due course. Give them a chance to see things first hand, especially in training.
- Number 2; Don't be scared to talk about your profession. He explains that if one is not truthful about the job i.e., warfighting, then one cannot blame the media for asking tough questions. He points out that the public will also ask tough questions if the military portrays peacekeeping as some kind of Club Med but at the same time seeks to purchase state-of-the-art war fighting equipment. The medium is the media and journalists need to be educated. Training and operational events provide that opportunity.
- Number 3; Make it easy for the media. Journalists and TV
 reporters usually have two or three stories per day and if they
 encounter any roadblocks they will go elsewhere to get stories sometimes positive, sometimes otherwise. The articles will get done
 with or without the support.
- Mr. Pugliese concludes one of his articles by saying: "... secrecy is needed for legitimate security aspects. But don't use those to hide mistakes. If a legitimate mistake has been made, acknowledge it and point out what has been done to correct the problem.

Mr. Pulgiese uses the example of one senior officer who summed up things pretty good when he said: "If you don't want to be on the front page doing stupid things, then don't do stupid things in the first place."

Attached at Appendix 5 is an article by Peter Worthington, of the Toronto Sun, entitled "Know Thine Enemy." Again, readers may not agree with the author's viewpoint - but it is worth heeding. He concludes his article with an assertion that the media is important in enabling an army to be understood and to do its job. Training with and of the media, and training for military-media relations will prepare the army for that eleventh Principle of War - effective mass communications to Canadians. Having read Peter Worthington's article, readers might want to ask themselves: "Who *is* the enemy?"!

MILITARY-CIVIL CONTACT

For too long our forces have been cloistered inside military fortresses and have lost touch with mainstream Canada. This is a peacetime phenomena particularly evident during the Cold War and post-Viet Nam eras. (Fortunately the Militia helped maintain our links to Canadian Society, as did the Cadet movement.) More recently, floods, ice storms and other disasters have caused the Army to venture forth and be seen, but tremendous damage has been done because of the period of paranoia. The cre-



Keep in touch with our communities and our roots while training.

ation of mega-bases demand an even greater effort to remain in touch with the nation.

Commanders must make the time and effort to ensure a degree of contact between soldiers and ordinary Canadians, and one way is through innovative training activities. Even ceremonial events can have tremendous training value. The battle procedure involved in putting on a Military Tattoo or a 'Freedom of the City' event can be every bit as complex as an exercise or operation. The public then gets to see the efficiency, effectiveness and professionalism of their soldiers and the quality of their training.

In spite of the inherent complexities and difficulties, periodically training on civilian property can be a great activity and I highly recommend it.

Note that some activities can't be exercised, but sometimes some unique ones can - and soldiers have to learn to be flexible. Again, these are unique opportunities for taxpayers to see their troops in action and maybe also play a part.

Most Canadians are supportive of their soldiers and enjoy seeing them close at hand.

PROFESSIONAL JOURNALS

Publishing papers on matters of interest and concern to our profession should be encouraged, particularly with respect to our training and doctrine. A confident and values-based profession can encourage and accept internal critique. Members of the profession should be comfortable withstanding the scrutiny of fellow members. A professional journal which stimulates discussion can benefit the Army and help produce better doctrine, better training, better tactical practices and better leaders.

How we encourage junior officers to write without fear of repercussions is a dilemma. How we get senior officers to give thought to the major issues and publish their thoughts is equally a problem. Can we permit anonymous papers? Or will it help to have high-priced editorial boards to select "suitable" papers to be published? What are the consequences of going public on highly controversial matters? I do not have the answers - but I do know the

consequences of not acting when problems are perceived: professional stagnation and the persistence of the problems. If we developed into a learning organization with a healthy respect for fellow professionals, and if we encouraged self-analysis, then presumably these issues would evaporate. Other armies have done it and presumably we should be able to do likewise.

THE REAL WORLD

It is easy to become totally engrossed in the training of a unit while ignoring the "real world," especially with our soldiers experiencing multiple operational tours. COs must keep in mind that the soldiers have family lives and that often they participate in community activities - or sometimes have second jobs or are taking educational programs. For these reasons training (or travel) should not be scheduled on weekends unless it is absolutely essential. Occasionally prolonged periods of training are essential. Unit training plans should incorporate opportunities to occasionally give families the chance to see their soldiers in training. Invite journalists, business and community leaders to see and participate in training. In other words, keep in touch with the "real world."

To keep spouses informed I ensured that each soldier got a quarterly aide-memoire version of the annual training plan plus a quarterly training calendar. I soon found out that these never did get to the intended family member and thus I found it necessary to have second copies delivered to the homes. Keeping the soldiers and their families informed, and sticking to it, will go a long way toward allowing the troops to live a semblance of a normal life - at least give them some control over their personal lives.

Perhaps the solution is to offer the troops a certain degree of predictability. Establish quite clearly those matters which are of vital importance, plan well ahead, create and follow a sound set of ground rules, establish routines, keep the soldiers informed, and encourage dialogue. Also make a concerted effort to identify and eliminate the "least-effective training."

The "Real World" of the Militia also includes their employer, potential employers, school or community leaders and the members of the community they deal with. If these influential people are not familiar with and sympathetic to the demands placed on Reservists then the individuals must struggle to get their support just to find time to train. On the other hand, the more these constituents learn of the quality of training and development offered by the Militia, the more likely they are to be supportive and helpful. Executive stretch exercises, visits to the units, and opportunities to get a sense of the training should be offered to these key people - who in turn will be supportive of the individuals in the Army as well as supporting the Army as a valued Canadian institution.

"The care of your men in all circumstances, whether they are temporarily or permanently under your care, is your first and last consideration. Any dereliction in that regard will cause justifiable wrath." ²¹

- Major W.A.S. Dunlop The Fighting Soldier, 1940

TRAINING SHOULD BE FUN!

How dare I say such a thing in this resource-constrained, heavily tasked, politically correct environment of today's Army. Well, when soldiering stops being fun we will lose many a good soldier, and that is regrettable. After all, the army is a very human, people-oriented calling. We live, work, train, fight and face hardships and unlimited liability together. We have to want to be



Training can be fun.

together and not only keep the team going, but succeed as a team. If there wasn't some fun, some humour and some humanity in our training then we would be a sorry lot indeed and we would most certainly could not withstand the pressures of operations and war. We might as well go work at a bank or a factory! One only needs to read books such as George Blackburn's trilogy, or those by Denis Whitaker and Farley Mowat to grasp how important the human element is in training and operations. So, don't be afraid to make some aspects of training fun. Besides, as an old friend used to say: "They're not shooting at you, are they?" - or at least they shouldn't be. On the other hand, another friend said that: "Training shouldn't be a popularity contest!" They're both right.

RECOGNIZING SUCCESS

Just as honours and awards are important psychological reinforcers in operations and war, so too are they in training. They should take on a different form however: A few words of praise may be all that is required, and telling the troops why they earned the day off will help. The achievement of high standards, innovation, efficiency, new tactics and better support to training are examples of performances which would warrant recognition and the conduct of high quality training should be considered of such significance that is worthy of praise.



PART 8 SUPPORT TO TRAINING

TARGETRY AND SIMULATION

Balancing today's ways of doing things while taking advantage of technology which will benefit tomorrow, is a major challenge in the training business. One must wonder, in perhaps simplistic terms, what training technology could be bought for one year's worth of training ammunition and what should be the ultimate, long-term benefit?

In George Blackburn's book, "Where The Hell Are The Guns", he describes the training technologies which they improvised in the 1940's, such as: small-bore inserts for guns, moving tank targets, indoor puff ranges and others, all of which would be familiar to today's Gunners because things haven't changed much. We still have .22 calibre inserts (which are almost never used), we don't have moving targets anymore, and the puff tables are now computerized but not much different from his day. One might wonder how much the army has progressed!

With the revolution in electronic simulation there are great opportunities for vastly improved field training at the lower levels. A higher degree of realism and objectivity in training can be introduced and battlefield tactics and movement can be vastly improved. The Army must keep pushing for improved targetry and improved simulation. The current state of targetry in the CF is extremely poor, causing a great waste a lot of time, money and energy because the soldiers cannot properly measure capability on the ranges nor can they achieve full advantage of pre-live fire training. Efforts must continue to rectify this unsatisfactory situation and Commanders should press their superiors to take action. Concurrently unit COs should do what they can through their branches and various technical and procurement staffs to improve the situation.

In sending soldiers into harm's way with the frequency noted as of late it is essential that high-technology simulation be exploited to prepare them. These are no longer "nice to have," but are essential training tools.

These problems are compounded in the Militia units because they need the simulation to an even greater extent, and in that context even less is available.

In Appendix 6 Major Laurence O'Neill (retired), gives a detailed explanation of the current state of the art in technology in the Canadian Army today. It is well worth the read. See Appendix 6.

"...he gave up his smaller guns to be melted down and manufactured into better ones. When he began the 1863 campaigns, Lee had a better and newer artillery train. His logistics were reduced and his firepower was increased." ²²

Sullivan and Harper Hope Is Not A Method

RANGE DEVELOPMENT

Range development is another area that requires the personal interest, involvement and input of Commanders and COs. Brigade and Base staffs want and need unit inputs and if units can take on self-help or low cost projects then they should be urged to do so. The ideas of junior officers and NCOs should be captured and assembled to ensure continuous development and improvement of the ranges and training areas. Ideas picked up on exchanges and visits should also be considered. We have not been very innovative in this area as can be seen with our rifle ranges employing butts, butt parties, archaic communications, etc. As pointed out, in The Second World War they were more innovative than today — for example, they even had mobile anti-tank targets on ranges, while the best we do today is shoot at old car hulks sitting on the ranges. Developing ranges should be an art, like developing a golf course or planning the landscaping of a Base - but in fact it tends to be a lower priority effort than these less important activities.

BUSINESS PLANNING

How often have we set up elaborate bivouac camps for stays of three or four weeks at the expense of training? How often have Gunners and tankers prided themselves on how many rounds went down range? How often has the "training" of infantry units consisted of little more than blowing off five million dollars worth of ammunition? Consider our totally inefficient range practices and butt parties. What if we had to account for the hours of our people? Are we are using our resources effectively? I would suggest not - at least not always.

Many still cringe at the phrase "Business Planning," but it is a necessary component of modern military life. It is not new either. No commander could train without planning for resources properly, just as in operations one cannot conduct campaigns successfully without detailed planning, husbanding of finite resources, sound administration and reliable logistics. Surely this is what business planning, or conducting a training estimate for that matter, is all about. Again most armies of the world use business planning approaches and they remain remarkably successful. Certainly we can and should be able to do as well as them.

If not applied correctly business planning tends to the extreme and suffocates common sense. For example, training ammunition should not be considered as just a dollar resource, to be divided up equally to all units in a Brigade. Different natures cost different amounts and different units require different quantities. Commanders must go back to the training aim, standards and requirements, by unit, before they allocate ammunition. Then it should be expended for the proper purpose and not traded off for other purposes. Command decisions based on a sound estimate should be the driving force.

Just remember that the business plan is there to support training, ensuring that training gets more than just the residual resources. This means

that the leaders and commanders, not the "bean counters," should be making the decisions. Ultimately, the business plan is nothing more than an enabler that helps leaders make informed decisions supported by relevant information and analysis.

ACCOUNTABILITY FOR WEAPONS AND EQUIPMENTS

Weapons and equipments must be handled with due respect, maintained properly and be accounted for when units are training, as well as on operations. There is no vehicle, weapon or equipment in a unit, which is not signed for by an individual. Further, every soldier works for and reports to an NCO. Accordingly, NCOs should be expected to check, inspect and account for vehicles, weapons and equipment within their areas of responsibility. Further, they should be held accountable if these items are needlessly damaged, misused or lost. If there is a rash of such incidents in a unit, then an officer must be held accountable. Note that the same policy is equally applicable in operations and is not merely peacetime consideration. Prepare for operations through training.

The old business of the officers staying until the last weapons were cleaned, accounted for, inspected and secured, served many a purpose. It wasn't that the soldiers were not to be trusted, but instead symbolized the importance of weapons to a fighting unit and the responsibility of officers to the men. Besides, it ensured the officers remained in touch with their troops and they probably learned a thing or two in the informal discussions around the weapons, like: "Sir, you sure blew it today, didn't you!" or, "Come on over here sir, and I'll show you how to do it."

ADMINISTRATION AND DISCIPLINE

Administration and discipline in training should be at the same high standards as in garrison or on operations. The deployability of soldiers and their administrative fitness (e.g. wills, next of kin, medical pay arrangements, etc.) must be confirmed before exercises, for accidents and casualties are every bit as possible as when on operational service. Unsoldierly behaviour, unsafe practices, negligent discharges, AWOL, incompetence, alcohol misuse and other offences may well occur and these must be dealt with expeditiously and firmly. Train in peace as you would conduct yourself in war.

*

PART 9 CREATING A LEARNING ORGANIZATION

"The only real failure is the failure to learn." ²²
- Sullivan and Harper
Hope Is Not A Method

LEARNING ORGANIZATIONS

Having an army which is a "learning organization would greatly support training, and training can reinforce the strength of a learning organization. I have left to the end this most important aspect to consider creating a learning organization.

As I read back I note that much of what I have said is about becoming and being a learning organization. What we need is a much greater emphasis on this philosophy, i.e., all commanders and leaders must consistently work at creating a learning environment, no matter the task at hand. Encouraging this philosophy has got to start at the top, and once it catches on it must be part of the thinking and action at every level - be it the section, the counter in the quartermaster stores, the transport platoon, the CO's "O" Group or the bureaucracy of higher HQs.

General Sullivan and his colleague, Colonel Harper, have said it all in their book, "Hope Is Not A Method". It is well worth the read. The learning organization philosophy they espouse is based primarily on Peter Senge's concepts as set out in his book, "The Fifth Discipline: The Art and Practice of the Learning Organization," also well worth reading. These make for a good study and should stimulate a change in attitude and actions. Canada's Army can learn much from the US Army experience from the seventies to the nineties, and can thereby learn to transform itself into a learning organization.



PART 10 CONCLUSION

CREATING OPERATIONALLY CAPABLE UNITS

In conclusion, what commanders should expect as the product of training are steady and capable multi-purpose units - units which are operational and have the potential to readily become more proficient with added equipment and prescriptive training. The following indicators are present in a good army unit after a period of training:

- · sound leadership;
- good command and control;
- · cohesion:
- · standardized ways of doing things;
- · sound discipline and a disciplined way of doing things; and
- the use of good battle procedure whether the task at hand is operational or administrative in nature.



Moving out - Into the future.

Units and formations in which these characteristics are evident can take on any task and quickly improve their readiness levels simply by increasing the time and resources available and the intensity of activity. They can prepare for any possibility by adjusting their focus. They can adapt quickly to new weapons and equipment, and the leaders can assume responsibilities two levels up.

Units and formations lacking any these indicators are most assuredly not training properly. If they have not mastered these requirements, then they should go back to the drawing board and rebuild. They should train until they meet the specified standards and achieve these criteria.

TRAINING - THE FUNDAMENTAL ACTIVITY

Training is not just one more activity performed in the Army. When not engaged in operations it is the fundamental activity. It is the raison d'etre of an army in peacetime and the most important activity in preparing for operations and war. Even if assigned frequent taskings in para-military roles and

non-warfighting missions and even if the support in money, equipment and other resources is not at the optimum, officers, both commissioned and non-commissioned, must keep the profession of arms alive through training. That is the responsibility of the leadership of the army and training is the means by which the character, soul, spirit and muscle of the Army is molded, exercised and developed.

Through effective training, brigade and unit commanders can learn from the past, build on lessons learned and prepare for the inevitable strains, challenges and opportunities of the future. Sound training will build strong teams which will succeed no matter the task. The most important team in the Canadian Army is the unit, the regiment, or the battalion. I encourage commanders and leaders in the Army to train their units hard and train smart.



Train hard — train smart.

Lieutenant-General Sir Francis Tuker in his book, Approach to Battle, remarks:

"Train hard: fight easy. On the day of battle every officer and every man will bless the leader who has held fast to this motto and lived up to it. They will grumble in peace and rejoice in war, but in both peace and war they will have the self-respect that all men have who are true masters of their craft." ²⁴



APPENDICES:

- Appendix 1 Aide-Memoire Training Visit By A Commander
- Appendix 2 An After-Action Review Discussion Check List
- Appendix 3 Model of Training Progression for a Unit
- Appendix 4 Model of Training Progression Specific-to-Mission Training
- Appendix 5 "Know Thine Enemy," by Peter Worthington.
- Appendix 6 "Training Technology: The Challenges," Major (Ret'd)
 Laurence O'Neill, CD

BOOKS TO READ ON COLLECTIVE TRAINING

There is not a lot written on the subject of collective training in the army. I would recommend the following books:

- "APPROACH TO BATTLE." Lieutenant-General Sir Francis Tuker, British Army (Retired).
- "COMMON SENSE TRAINING: A WORKING PHILOSOPHY FOR LEADERS." Lieutenant-General Arthur S. Collins, Jr. U.S. Army (Retired).
- "FAILURE IN HIGH COMMAND: THE CANADIAN ARMY AND THE NORMANDY CAMPAIGN." Lieutenant-Colonel (Retired) John A. English, Canadian Army.
- "HOPE IS NOT A METHOD." General (Retired) Gordon R. Sullivan and Colonel (Retired) Michael V. Harper, U.S. Army (Retired).
- "MEN AGAINST FIRE." Brigadier-General S.L.A. Marshall, U.S. Army (Retired).
- "THE FIFTH DISCIPLINE: THE ART AND PRACTICE OF THE LEARNING ORGANIZATION." by Peter M. Senge.

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- **21.** Dunlop, Major W.A.S. The Fighting Soldier, London & Toronto: William Heinemann Ltd, 1940. P4;
- 22. Sullivan and Harper. Op Cit. P 143;
- 23. Ibid. Op Cit. P 193; and
- 24. Tuker. Op Cit. P391.

Appendix 1

AIDE-MEMOIRE TRAINING VISIT BY A COMMANDER

When commanders at all levels visit training they would normally have a purpose in mind and would draw conclusions about what they have seen, heard and sensed. This aide-memoire offers some suggestions on points to consider and conclusions which may be drawn. Offer a few words of encouragement and advice on the spot, at an appropriate time, and follow up as required.

TRAINING VISIT AIDE-MEMOIRE - POINTS TO CONSIDER

1. AIM

- · Achieving Aim
- Focused
- Relevant
- Realistic

2. DESIGN AND CONDUCT

- Progressive Stages
- · Logical Rhythm and Tempo
- Repetition
- Challenging
- Developing People
- Training Second Teams

3. LEARNING ENVIRONMENT

- Confirmation At Stages
- After-Action Reviews
- · Proper Critiques and Coaching
- Recording Lessons Learned
- Mid-course Adjustments

4. TRAINING ATMOSPHERE

- Safety
- Adequacy of Pre-training Preparations
- Efficient Use Of Resources
- Care and Maintenance of Vehicles, Equipment and Weapons

5. LEADERSHIP

- NCOs Making Sure Training Runs Smoothly
- Officers Doing Their Job
- Leaders Being Developed

6. GENERAL

- Soldiers Know What They Are Doing and Why
- Total Team Involvement
- Effective Use of Available Talent
- Good Feedback and Healthy After-Action Review Process

CONCLUSIONS

Determine the answers to the following questions, then do something about it:

- Is the training effective?
- Are there better ways to achieve the Aim?
- How can the training be improved?
- How can the learning environment be improved?
- Are the "lessons learned" valid?
- Are the problems ones of doctrine, leadership, equipment, simulations, pre-training, resources or coaching?
- Are there any specific recommendations?

Appendix 2

MODEL OF AN AFTER-ACTION REVIEW DISCUSSION CHECK LIST

The After-Action Review process is vital to learning. Effective feedback fosters trust and helps prepare the organization for future endeavors. The key after-action review questions are: What happened? Why did it happen? and, What should be done about it? It is not simply a critique nor is it intended to fix blame - and mistakes should not be dwelled upon, but learned from. In a healthy and robust learning environment all participants engaged in an activity, regardless of rank or appointment, are encouraged to examine what took place and offer remedial solutions in an open, frank and professional exchange of viewpoints.

It helps to have a guide or aide-memoire to assist with consistency, completeness, focus and brevity. The check list which follows was provided by the Joint Command and Staff Training Centre, Kingston, and serves as aide-memoire for the conduct of after-action reviews in JCSTC exercises. Although this model is designed for training events, in a successful learning organization the after-action review process would be practised no matter what the activity.

AFTER-ACTION REVIEW (AAR) DISCUSSION CHECK LIST

Step 1 - Ex Director Reviews the Ex Aim and Training Objectives.

Step 2 - Friendly Force Commander Reviews His Mission and Tasks.

• Uses maps and graphics to show what was supposed to happen.

Step 3 - Enemy Force Commander Reviews His Mission and Tasks.

 Reviews his plan to defeat the Friendly Forces using the same training aids as the Friendly force Commander.

Step 4 - Exercise Director Reviews What Happened Chronologically:

- 1. The aim of this discussion is to ensure that specific issues are revealed both positive and negative to exploit the lessons learned.
- Guide the discussion with open-ended and leading questions. No "yes" or "no" questions.

Step 5 - Exercise Director Leads a Discussion of the Key Issues.

- 1. The purpose of this discussion is for participants at all levels to discover strengths and weaknesses and to propose solutions.
- 2. The discussion can follow one of three options:

A. Option 1 - Discuss the Chronological Order of Events

- This technique is logical, structured, and easy to understand.
- It follows the flow of training from start to finish.
- The participants are better able to recall what happened.

B. Option 2 - Discuss the Six Combat Functions

- Command
- Information Operations
- Manoeuvre
- Firepower
- · Protection, and
- Sustainment
- This technique focuses on the application or influences of the six combat functions in the phases of the exercise.
- By examining each function, participants can identify functional strengths and weaknesses.
- This is a useful technique in training the staff engaged in the management of the combat functions.

C. Option 3 - Discuss Key Events/Themes/Issues

- A key events discussion focuses on critical training events which directly support the training objectives which the chain of command identified before the exercise began.
- Keeping a tight focus on these events prevents the discussion from being side-tracked by issues which do not relate to the training objectives.
- This technique is effective when time is limited.

Step 6 - Exercise Director Leads a Discussion Of Optional Issues

The Exercise Director may discuss specific issues that require examination to derive lasting training benefit (e.g., changes to SOPs).

Step 7 - Exercise Director Summarizes the Key Points Raised

- The Exercise Director builds on the consensus of performance that developed during the After-Action Review with the exercise players.
- 2. He reviews the key points, identifies areas showing strength and those needing improvement. He suggests corrective actions.
- 3. The Exercise Director should end the After-Action Review on a positive note, and link conclusions to a plan for future training.

Step 8 - Exercise Director's Optional Meeting With Commanders

- Following the AAR, the Exercise Director may lead a discussion with selected commanders to examine their required input to accomplish the desired training results.
- 2. These sessions may also be used to discuss other advanced topics that flowed from the training, e.g., emerging doctrine, future training, etc.

Step 9 - Re-Training

The real benefit from the After-Action reviews comes from re-training:

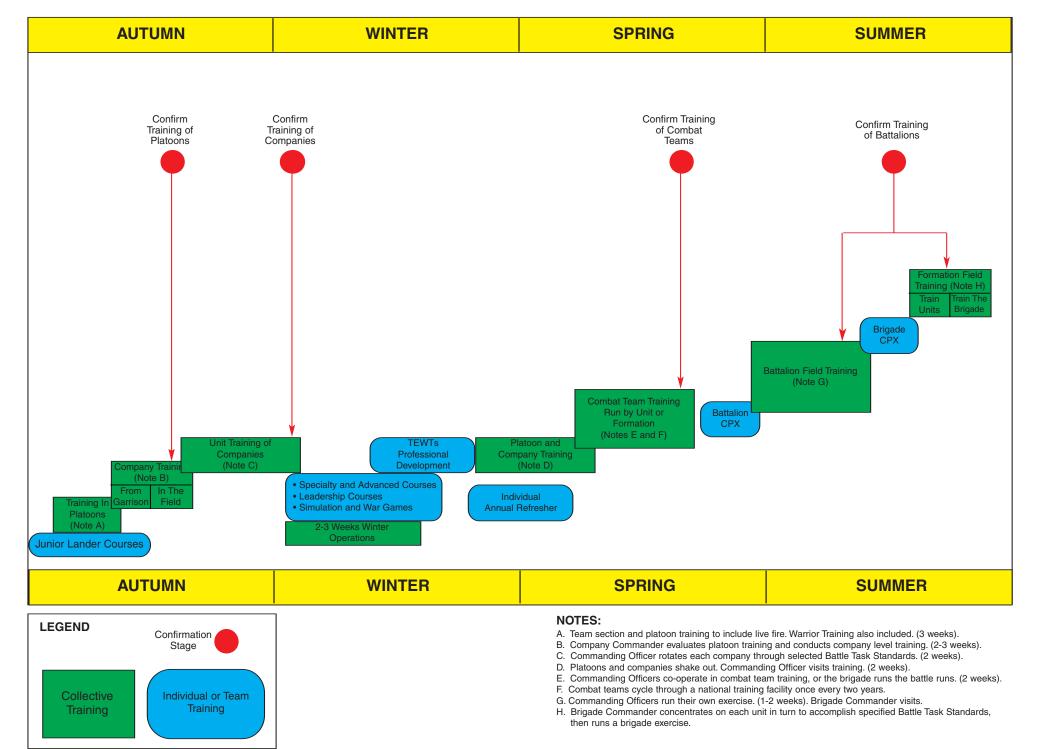
- 1. By applying lessons learned, the unit can improve performance to meet the required standard.
- Commanders should not delay to reschedule re-training. Units must be made aware that they did not perform the task to the required standard and re-training must occur.
- Dramatic improvements are possible through re-training, especially when the units are motivated and aware of the improvements required before they begin re-training.

Step 10 - Institutionalization of Lessons Learned

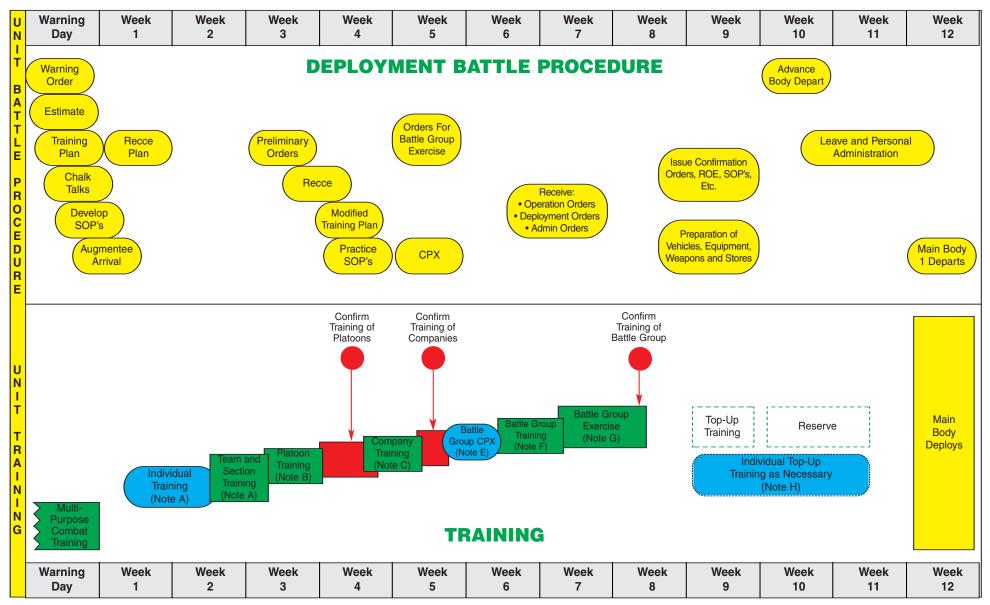
Subsequent to the training event, it is incumbent upon commanders to institutionalize the lessons learned. Consider the following:

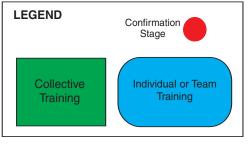
- 1. Modify the doctrine, SOPs, drills, tactics and equipment to remedy the problem and enhance future performance;
- 2. Adjust the organization structure and command and control arrangements;
- 3. Re-assign key personnel and re-balance teams;
- 4. Plan future opportunities to confirm, then build upon, lessons learned; and
- Share the lessons with other organizations and training institutes and publish them in professional journals.

MODEL OF TRAINING PROGRESSION FOR A UNIT



APPENDIX 4 MODEL OF TRAINING PROGRESSION - SPECIFIC-TO-MISSION TRAINING APPENDIX 4





NOTES:

- A. All individual specific-to-mission training completed by end of week 2.
- B. Practice and adjust specific-to-mission drills and SOP's.
- C. Companies train in scenarios set by battalion by week 5.
- D. Train the support augmentees as they arrive, but before battle group training.
- E. During CPX period the troops do administration, unit preparations and refresher training.
- F. Battle Group Commander runs training.
- G. The complete Battle Group is exercised in an in-theatre scenario by an outside agency. A national training facility would be ideal, but training assistance team would help.
- H. Be prepared to top-up the training of some individuals.

Appendix 5

KNOW THINE ENEMY

By Peter Worthington

While the media per se is not exactly an enemy of the military, and vice versa, of course, these days it often has this appearance. Broadly speaking, the media has become mistrustful of the military and the military mistrustful of the media. Both with some justification.

Reasons for this are varied. From a media point of view, few media commentators have ever served in the military or had direct links with it. Even Peter Desbarats, former Dean of Journalism at the University of Western Ontario and a career-journalist who was a commissioner on the Somalia Inquiry, seemed to have little understanding or appreciation of what made soldiers tick, even after two-plus years of listening to military people testify. In his book on the Inquiry (Somalia Cover-Up) he acknowledges as much: "(It's) hard for me to imagine the kind of individual who seeks out this uniformity." Soldiering is an alien world to him, and yet you feel he doesn't much like those who join up. It makes one wonder where he was during all the testimony at the inquiry.

In the 1950's and '60's there were still journalists who had served in the forces during World War II and who had some understanding of things military, and for whom soldiers weren't alien creatures. The Vietnam War affected many young journalists who matured thinking that anything they were told by military Public Affairs people might, or might not, be true and at best should be regarded skeptically. Damage control by DND Public Affairs and others since Somalia and Balkans peacekeeping (plus other incidents) have done little to alleviate media skepticism and much to increase it.

Speaking as one who has concern, respect and affection for the military, who has served in both the navy and army when the country was at war, and who has spent a large part of a journalistic career attending wars, revolutions, coups and crises in the Third World, who believes fervently that a competent, well equipped military is essential for both security and peace, I have opinions (prejudices? enlightenments?) how to improve relations between the media and the military.

A problem is public relations.

When I was a junior infantry officer (Korea), it always struck me (and other subalterns) that when a call from Higher Command for a public relations (or liaison) officer, the unit invariably nominated its most expendable officer. The sighs of relief that echoed through the unit would turn to groans when, weeks or months later, that expendable officer would re-appear in the unit escorting visiting journalists and given them an authoritative run-down on the tactical situation which, as an infantry officer and prior to being a PR officer, he could understand.

The subsequent reports of these captive journalists reflected what they have been told about the situation, and were often wildly inaccurate, incurring hoots of derision from troops at every level. Blame would be attributed to the journalists when, in fact, they may have been victims too.

Undoubtedly things have changed in our military, but in general, public affairs officers - depending on the individual - do not have a great deal of credibility with the media.

The best "salesman" for the military, are the combat arms - soldiers in the field, regardless of rank.

When it comes to the army, the most effective way to get the media to understand what makes soldiers tick, is to bring the two together. Rather than guided tours, or one-day group visits, I think the Public Affairs people in Ottawa (or units) should study the media and on the basis of their assessments invite certain individuals, on an exclusive basis, to spend some time with a particular unit, or participate in an exercise with troops in the field.

"Exclusivity" is catnip to journalists - irresistible.

The chance to participate in a northern exercise, or spend a couple of weeks with soldiers in the field be it Bosnia or wherever, will inevitably create better understanding among reporters who attend.

A journalist spending any length of time with a unit will inevitably hear a lot of scuttlebutt, stories, rumours, snafu, dirty linen, exaggerations and tantalizing stuff that would make embarrassing reports. This is a calculated risk. Being open and honest with reporters can result in embarrassment, but far more likely it will result in understanding, discretion, perspective.

Combat units are usually far more candid and reliable than rear echelon or headquarters stage-managing. One only has to look at how initial attempts of troops in the field to be open and forthright about awkward incidents were overruled by higher command and eventually blossomed into scandals and ruined careers - Somalia, the Bakovici mental hospital in Bosnia, grenade accidents, misuse of funds, etc.

A goal should be to get as many responsible media people as possible familiar with and understanding of the military. "Exclusivity" can't be over-emphasized. If one newspaper or TV outlet performs well, keep giving them chances. Their rival media outlets will complain and want preferential treatment too. Give them a chance, and if they perform well, alternate and juggle exclusive assignments.

Scandals will occur, and a sure way to guarantee media sensationalism is to try to cover them up. Candor is disarming. Judgement should be used, but responsible journalists will not betray a trust. Always, the journalist will want to know what the truth is, even if he is pledged not to use it. Lying or misleading makes an enemy.

Once the trust of journalists has been earned, they will often protect you from your own indiscretions. My father, during the war and later as Canada's Civil Defence Co-ordinator, was often the focus of publicity and had a good rapport with the media, and often could be counted on for a lively or controversial quote. He was occasionally indiscreet, sometimes inadvertently, but rarely did the media hang him out to dry. And never did he claim he was misquoted.

In short, the greater direct contact there is between line officers and the journalists, the better off both will be. Rank-and-file soldiers are better than they've been depicted in the media. I'd argue that the greatest public relations problem the Canadian military and media have is at the general officer level. That may be due in part with today's system and the civilization of the military bureaucracy.

Of course, when officers have to toe the line and echo conventional wisdom, they may not believe, it makes it tough - witness the credibility problem President Clinton's press secretary has. "Off the record" is usually respected by journalists, and while it is alien for soldiers to speak openly and off the record to the media, others do it and it works - providing you know the individuals you are dealing with. The FBI does it, the American military does it, RCMP Security used to do it, the police used to do it - all to advantage. I think the military should consider it too, because the message they want to get across is too important to be left to chance, politicians and bureaucrats who,

traditionally, neither like, understand, nor trust the military which, over the years has served Canada more loyally and steadily than any government has.

Above all, try to know the individual journalists you are dealing with, and when you find a trustworthy one (not always easy) consider feeding him to keep him influential and able to get the military message across.

Anyway, these are just ideas and a topic for discussion...

BASIC GUIDELINES FOR DEALING WITH THE MEDIA

- Don't trust the media blindly trust individuals in it.
- Don't lie or attempt to mislead journalists it invariably boomerangs
- Where possible, deal with journalists without presence of Public Affairs types
- Off-the-record (i.e. not for attribution) is usually honoured, depending on the journalist. Better and safer than "no comment".
- Try to get journalists to invest time with a unit, to get to know and under stand soldiers. More exposure means more empathy. Avoid where possible, the one-day or few hours visit.
- "Exclusivity" is irresistible to media. Offer editors exclusive access. It helps
 if you identify journalists who might benefit gives the impression that he's
 objective and trustworthy, and will try to be worthy of this confidence.
 Editors preen under flattery.
- Don't deny scandal or embarrassments candor is disarming and results in whatever is being "exposed" being put into perspective.
- Anticipate inevitable media attention by "leaking" the truth to one reliable media outlet; other media tend to echo the first one.
- Remember everyone tries to manage news, which journalists recognize and accept. Invariably the 'truth" is less damaging than speculation or attempts at second-guessing.
- Loyalty is admired, but loyalty should never require lying. Better to refuse comment than lie; better still to go off-the-record and outline the problem.
- Journalists, as a group, tend to have quick minds, are usually ill-informed, and only want a story. Few have personal axes to grind. (Exceptions are soon identifiable, and need not be catered to). As a group, they are modest, if not mediocre intellects.
- Journalists are vain, and if they can be made to feel that they are experiencing or enduring something special, they feel status. Example: a reporter being a member of a platoon on an exercise, sharing conditions, will exaggerate it into a macho feat.
- It's important and useful that journalists know, on or off-the-record, the
 problems involving inadequate equipment, restricted use of ammunition for
 training, lack of flying time for airforce, budget restrictions, personnel
 problems, governmental disinterest, etc. They can become useful allies in
 persuading government.
- Journalists, as well as being generally ignorant of things military, are also lazy as a species. Where possible, things to be publicized should be spelled out or documented, preferably in print. They will usually respect confidentiality.
- Do not mistake journalistic errors in reportage with malice. Until proven otherwise, gentle corrections are a better investment than angry condemna-

- tion unless, of course, malice is irrefutable.
- it's always a good investment to write letters of appreciation or praise (deserved or undeserved) to the publishers or editors of journalists who try to do a fair story on the military. This makes an unwitting ally of the reporter, be (s)he print or T.V. Vanity is sublime.
- It should be kept in mind that often the best and only thing that motivates government (or DND brass) is publicity, positive or negative. Bearing this in mind, the media can be a useful weapon (tool?) in the military's efforts to be understood and do its job.

Appendix 6

TRAINING TECHNOLOGY ISSUES

By Major (Retired) Laurence O'Neill, CD

The Romans are sure of victory...for their exercises are battles without bloodshed, and their battles bloody exercises.

Josephus

AIM

This short paper focuses on the use of training technology, particularly simulation, to enhance training effectiveness of soldiers and of formed units and formations.

INTRODUCTION

The requirement for highly disciplined training focused on specific objectives has always existed. When budgets and training opportunities afforded the luxury of over-training, this requirement was not at the forefront. In the Army's current environment, however, training resources are much reduced, roles and tasks are much broader than in the past and opportunities to prepare for each task are much more restricted. Therefore, it is imperative that every dollar spent on training must be well spent, closely focused and justifiable. The exploitation of the capabilities of training technology can go a long way to overcoming these challenges to training.

One of the most significant events in the last twenty years has been the exponential growth of new technologies in the field of warfighting. The increasing complexity of the modern battlefield and the wide range of tasks that may be assigned to the Army demand extensive individual and collective training in order for soldiers and units to develop and retain the necessary skills required for these tasks.

This requirement to master technology is both a challenge and an opportunity. It is a challenge because modern armies must constantly develop new means and devote considerable resources to retain mastery of emerging technologies. It is also an opportunity, because technology has provided powerful training tools that allow the retention of essential skill sets that previously could only be kept through expensive field training or actual operations. This is especially significant in a climate of increased constraint.

Recent technological advances in simulation have greatly enhanced the capability of this technology to act as a "training multiplier". Simulation technology can replicate battlefield environments for individual and collective training of combat troops at a level of fidelity never before attainable outside of combat. The resulting combination of confidence in a commanders' leadership, in soldiers' skill and in a unit's equipment are keys to success on any battlefield.

CATEGORIES OF SIMULATORS

There are three generally agreed categories of training simulators.

These are:

- **A. LEVEL 1 SIMULATORS.** Level 1 Simulators are designed to support individual and crew skills. Gunnery trainers, small arms trainers and recognition trainers are typical examples of Level 1 Simulators;
- B. LEVEL 2 SIMULATORS. Level 2 Simulators are designed to train crews and teams in their tactical skills. Weapons Effect Simulation and the Close Combat Tactical Trainer (CCTT) are examples of Level 2 simulators; and C. LEVEL 3 SIMULATORS. Level 3 simulators are designed to train and evaluate the tactical skills of commanders and their staffs. Janus and the Command and Staff Trainer (CST) are examples of Level 3 simulators.

APPLICATIONS OF SIMULATORS

The broad applications of simulation in support of training are:

- **A.** To retain the essential skill sets in individuals, crews, and units to meet the standards for operationally assigned roles and missions;
- **B.** To maximize the value of money spent on training, particularly on field training exercises by preparing participants for the field events through procedural training and the achievement of skill "gateways" prior to live training; **C.** To maintain skill sets that might otherwise be unaffordable (e.g. command
- of higher formations, joint and combined operations, etc.);
- D. To permit evaluation and validation of training; and
- **E.** To achieve savings in O&M costs by replacing costly resource-intensive activities with simulation.

Simulation has the potential to raise operational readiness to higher levels than possible through conventional training. Traditional methods of maintaining operational proficiency have concentrated on extensive field training, shooting and practical exercises. In many cases, these methods have not provided the ability to record and accurately assess the conduct of field training. Consequently, after-action reviews have concentrated on macro problems that were subjectively observed by the participants and controllers. Furthermore, not all trainees reaped the full benefits of this training because the assessment of individual skills was limited by the span of control of the available exercise support staff.

The immense computing power of modern simulators allows continuous recording of events and performance assessment of all trainees. Therefore, the product of any simulated exercise is a true sum of the interactions of all participants. Each soldier receives benefit from all training since individual performance can be assessed and errors in procedure or judgement can be corrected. Only through simulation training can one objectively evaluate training standards and provide the feedback that is essential to improved operational readiness.

The use of simulation overcomes economic and environmental disadvantages that have limited conventional field training in the past. Severe financial constraints, a plethora of tasks that disrupt unit cohesion, the requirement to husband equipment to extend its in-service life, a lack of suitable training areas and environmental considerations have cumulatively had a negative impact on field training. Simulation is normally much less harmful to the environment and considerably cheaper than conventional train-

ing methods.

Soldiers and their commanders must be exposed to various battlefield conditions and environments in order to develop their skills and knowledge. Simulations has a significant impact in the area of refresher training, skill maintenance, retaining combat proficiency and the evaluation of units prior to live firing or operational deployment. Simulation includes the use of practice ammunition, sub-calibre devices, embedded training software in operational equipment, computer simulation of enemy activity, instrumented training ranges, etc.

Total training of soldiers and commanders is greatly enhanced by allowing them to realistically experience the friction, stress and uncertainty of actual combat. At the same time, performance can be monitored and recorded and used to enhance afteraction reviews. This permits measured improvement in performance. Further, effective use of this technology will permit battlefield lessons to be learned during peacetime training, which in the past could only be learned painfully and expensively during the initial days of combat.

USE OF SIMULATION AS A RESOURCE SAVING TOOL

The US Army was the first nation to embrace the use of simulation to support all aspects of training. Ironically, during a period of almost unlimited defence budgets, they acquired a large number of simulation systems before any detailed training needs and benefits analysis was done. It was only in the past few years, when funding became scarcer, that they began to analyze the potential for savings through the use of simulation and sought proof of training transfer.

Training transfer has been clearly proven and is frankly a pre-requisite for any new simulation that will be considered for acquisition. Cost savings, however, have been more problematic. Acquisitions of simulation systems require a large investment in hardware and software. Savings are often marginal in the short term, or can only be realized by amortizing the cost of simulation by sacrificing other expenditures (e.g. ammunition). To achieve any significant saving, however, a large quantity of ammunition must be available to be cut.

For example, when the US Army decided to pursue the CCTT, a virtual crew tactical trainer for close combat arms, they paid for this project in part by cutting their M1 Tank ammunition tables by 10 rounds. Over a fleet of many thousands of tanks, this freed significant funds. Canada, with its 128 Leopard tanks and very restrictive ammunition budgets, cannot even afford to attempt the same methodology. However, the Army did pursue this strategy in its acquisition of Small Arms Trainers, by offering up the .22 calibre ammunition that could no longer by fired on indoor ranges. Due to lead contamination, to partially pay for the simulator project. It was still a very small offset to the cost of the simulation.

Other resource saving expectations are equally chimerical. Command and Staff Trainers greatly enhance the training quality of Level 3 training. Controllers are still required to provide the intelligent "Man-In-The-Loop" inputs that give the simulation its fidelity since computers cannot replace this. It must be remembered, however, that computer assisted exercises or CAX are still exponentially cheaper than field exercises at Battle Group and formation level, as these exercises are conducted principally to train commanders and their staffs.

Other measures can be taken to reduce the cost of training while using simulation. An example of this would be to create mock-ups of command posts for CAX. This permits just the deployment of only the training audience and controllers to an

exercise without the need to move large numbers of vehicles and support personnel that are only peripheral to exercise aim and training objectives. It is the latter personnel and equipment that significantly drives up exercise costs.

Arguments to justify the use of simulation therefore must focus on the value-added aspects of training that can be achieved through the use of simulation. Simulation is a powerful tool used to prepare soldiers, leaders and teams prior to field training or an operational deployment. Through the use of powerful analytical tools that are part of all modern simulations, weaknesses are identified and performance is carefully tracked, leading to measurable improvement in performance. As a gateway to live training, simulation provides commanders with an important tool that ensures all players are well prepared and ready for the conduct of live-fire training events. This results in higher quality field deployments, a better chance of first-time success in live fire gunnery and qualification shoots and the ability to retain those hard won skill sets in between field exercises.

THE CANADIAN ARMY'S USE OF SIMULATION

The record of the Canadian Army's use of simulation is mixed. For a brief period (1992-96) the senior leadership of the Army was receptive to using simulation to enhance training. General Gordon Sullivan, then Chief of Staff of the US Army, undertook the opportunity to guide his Canadian counterpart and other senior Army Generals through the USA in Fall 1992 to visit training facilities and see the possibilities of leveraging this training technology to enhance training. Following this visit, there was a flurry of activity that saw the acquisition of:

- a. Two Command and Staff Trainer systems (Janus and CST) to enhance the training of commanders and staffs at Battle Group and formation level;
- b. Direct Fire Targetry for each of the major training areas in Canada. This will permit the Army to conduct meaningful and challenging field firing events on fixed and mobile ranges;
- c. A Small Arms Trainer (SAT) to replace the loss of all indoor ranges in Canada due to the restrictions on inhalation of lead emissions. This unfortunate circumstance, which advanced the approval of this project, has actually proven beneficial for musketry training. Several US and UK studies have shown that the SAT which the CF will acquire will in fact improve and maintain musketry skills in comparison with traditional methods of small arms training;
- d. An Indirect Fire Trainer (IFT) that will replace the outdated IFT that is currently in service; and
- e. An AFV and Aircraft Recognition Trainer to fill a void that is not adequately covered by current training methods.

These acquisitions are all good news for the Army. While all of these simulations are important and satisfy identified shortcomings, the Army needs to ensure that they are introduced an integral to all new equipment purchases — not just add-on luxuries to be bought if monies come available.

At the time of writing, it appears that the Weapons Effect Simulation (WES) project may be progressing. WES will support tactical force on force or force on target exercises during field exercises. This project would see the acquisition of a transportable Battle Group suite of WES equipment, including range instrumentation, area weapons effects, data collection and analysis and after-action review facilities.

The fidelity and training enhancement achieved from the use of WES in field exercises cannot be overstated. All exercise players use their actual combat systems fitted with simulation. Players engage and achieve results based on their tactics and gunnery skills. All players are vulnerable to enemy and friendly fire. WES delivers realistic, challenging, and objective battle focused training. The After Action Review process will provide a credible, objective evaluation of a unit's tactical engagements.

This project will fill a gap in capability that was first identified in 1978 and will give the Army the capability of objective live field training and evaluation under highly realistic operational conditions. Every other major Army in the world has acquired this type of simulation and even Armies in conflict zones, e.g. the Republic of Bosnia and Herzegovina, have recognized its value as an essential tool that must be acquired to prepare soldiers for combat.

With WES, the Army will be able to objectively assess whether the units of the Army are operationally ready for the tasks that they may be assigned by the government. With this essential tool, training will improve and Canadian soldiers will be up to facing dangers with reasonable assurance and self-knowledge that they are indeed ready for the challenge.

CONCLUSION

To maintain effective combat ready forces, the Army needs to continue to pursue an acquisition strategy that will put in place modern training tools to maintain operational skills. It will remain a continuing challenge to assign the appropriate resources and priority to training technology in competition with other operational systems and operating practices. In this emerging Information Age, these tools are essential to prepare soldiers at units for their operational tasks.