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EXERCISE/EXERCICE Master of Defence Studies (MDS)

**The Feasibility of Developing
Militia Construction Engineer Trades**

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The Feasibility of Developing Militia¹ Construction Engineer Trades

Chapter 1

Introduction

*Too much army for our budget
and
Too little army for our tasks*

LGen M.K. Jeffrey

The primary purpose of the Canadian Army is to defend the nation and when necessary to fight and win in war.² The primary role of the military engineers within the Canadian Army is “to assist friendly troops to fight, move and live...” while “...denying the same ability to the enemy.”³ While seemingly straight forward, this is a diverse and difficult role which encompasses a broad range of tasks ranging from combat support to all manner of vertical and horizontal construction tasks.

In Canadian Forces (CF) doctrine, military engineering is further subdivided into combat engineering and sustainment engineering⁴. Sustainment engineering is that role which involves the provision of engineer advice, technical expertise, and resources and work to allow a force the ability to maintain, reconstitute, and regenerate itself. Examples of sub tasks include; civil-military engineering coordination, rear area restoration, infrastructure damage assessments, real property management, the establishment of temporary camps and the provision of utilities.

¹ Militia or Army Reserve Force.

² *Canada's Army* (pp 2).

³ The secondary role is “to fight as infantry” *Land Force Engineer Operations – Volume 1* (pp 1).

⁴ Combat engineering is performed by close support units or in support of manoeuvre forces (tasks are primarily mobility support, counter-mobility and survivability) and general support units for the formation as a whole. Sustainment engineering tends to be more permanent and is normally conducted by general support units. *Land Force Engineer Operations – Volume 1* (pp 2) Peacekeeping operations tend to blur these doctrinal distinctions and

Within the CF these tasks are largely performed by construction engineer tradesmen, or the 640 series occupational trades. These construction tradesmen are the military version of carpenters, plumbers, electricians and the like.

Construction tradesmen have deployed on virtually every major overseas operation conducted by the CF over the past 12 years. They have proven to be a vital component of the overall success of each and every mission. However, the apparent steady-state demand for sustainment engineers to support the current and projected overseas deployments is outstripping the CF's current structural capability to force generate to the desired levels. This is of great detriment to the health of these affected trades, and consequently the 640 series trades are suffering the effects (eg. attrition, low morale).

It is of note that at the present time there is considerable political interest with respect to the overall health of the Reserve Force and their ability to effectively contribute to CF operations. It is an ideal opportunity to introduce initiatives into the Reserve Force which are both feasible and that will provide essential capabilities to the Forces.

Scope

This paper will further define for the reader the 640 series trades, the problems they currently face and the potential detrimental effects on CF operations. It will also explain the advantageous strategic framework for change which currently exists. One possible solution on how to improve the overall situation of the 640 trades is presented. Finally, the paper will further investigate a number of alternate solutions to, and challenges associated with, this solution. However, the resultant central thesis is that *a viable Army Reserve Force capability, which supports the mandate of LFRR and which will improve the capability of both the Army and*

we see close support organizations providing a level of sustainment engineering type tasks which would normally be in the realm of general support organizations.

the CF to sustain operations, would be the creation of R640 construction engineer trades within the Militia.

Chapter 2

The 640 Series Trades

Initially all engineers, even the tunnellers, were employed mainly on accommodation construction...in addition to other types of shelters some 460 Missen huts were erected, mostly in battalion groups of about 40 each. With the huts went the necessary sanitary construction: bath houses, laundries, disinfectors, latrines and incinerators. Provision had also to be made for animal standings and shelters for thousands of horses. The increase in the amount of enemy aerial bombing which had taken place of late meant

therefore becomes critical when understanding the overall capability of the CF to sustain overseas operations at any given time.

While it might be unlikely that Canadian soldiers will be involved, at the formation level, in a large scale conflict in the near future⁵, it is apparent that they will continue to be involved in peace support operations. Since the first missions to the Former Republic of Yugoslavia in the early 1990s the Forces have maintained a significant number of personnel overseas. The sustainment engineering requirement to support this level of deployment is considerable, and there would appear to be no end in sight.⁶

In conventional large scale operations, units are supposed to fit within higher organizational frameworks for which they were designed. When a force is broken into smaller packages, which more frequently occurs on peace support operations, organizations invariably fall short of specialists who are normally grouped together at higher levels for reasons of economies of scale. Comprehensive capabilities which must be assembled and deployed in support of many smaller organizations defeat any savings made in the original grouping concept. In the Canadian case, the situation is exacerbated further in that only portions of higher formations actually exist within the standing force structure. This is precisely the case with many of the specialist trades within the CF, and of particular interest the 640 series or engineer construction trades.

The apparent steady-state demand for sustainment engineers to support the current and projected multiple smaller force deployments overseas is therefore outstripping the CF's current structural capability to force generate to the desired levels. This is of great detriment to the

⁵ *The Future Security Environment.*

health of these affected trades. An elevated operational tempo caused by repeated overseas deployments creates a number of problems, especially in small trades who do not have much depth from which to operate. According to Major Mann who is employed within the Directorate of Land Force Readiness, the 640 series trades are all considered to be on the “CF Endangered Species List” and have entered a cycle of attrition or the trade “death spiral.” In other words, once a trade falls below a certain strength threshold, the personnel who remain are under such increased operational pressure that they then release, which in turn creates a worse situation and so it goes on.

Support to Overseas Operations

*Question -What's
yellow and sleeps eight?
Answer - A CE Crewcab.*

Joke often told on CF Bases before UN Operations were common.⁷

Source unknown.

Notwithstanding the obvious value of accommodations, utilities and general creature comforts to the operational success of a mission, the importance of construction tradesmen to the overall success of overseas operations and to the morale of the personnel serving on those missions cannot be overstated. Until one can experience the hardships associated with the conduct of operations where no utilities exist, it is difficult to explain or appreciate the effects of their absence. This is especially apparent in harsh climates. The negative effect on morale of the troops over a prolonged exposure to an area with no proper utilities is significant, and symptoms

⁶ Indeed, according to the Director Land Strategic Concept research paper *Sustainment Capabilities for the Army of the Future* an effective and sustainable expeditionary force structure is required by the CF and includes an Engineer Support Unit (ESU) to provide sustainment engineering services to Canadian units.

can manifest both in mental and physical terms. The joke above, while seemingly superfluous, is actually quite telling. The advent of near continuous overseas deployments changed the attitude of the average soldier from one of disdain to one of admired respect for construction tradesmen. Serving members would understand the significance of this transition.

The Current Situation

The following table is drawn from an article within the July 2001 Journal of Canadian Military Engineers *Ubique* and depicts the health of the engineer technical support trades. The trades of concern within this paper are shaded within Table 1.

Table 1 – Status of Military Engineering Occupations⁸

Occupation	MOC	Status
Engineer (Officer)	24	Red
Airfield Engineer (Officer)	46	Amber
Field Engineer	041	Green
Field Engineer Equipment Operator	042	Green
Geomatics Technician	142	Green
<i>Refrigeration and Mechanical Technician</i>	<i>641</i>	<i>Red</i>
<i>Electrical Distribution Technician</i>	<i>642</i>	<i>Red</i>
<i>Electrical Generating Systems Technician</i>	<i>643</i>	<i>Red</i>
<i>Plumber and Heating Technician</i>	<i>646</i>	<i>Red</i>
<i>Water, Fuels and Environmental Technician</i>	<i>647</i>	<i>Red</i>

⁷ Once soldiers learned of the direct relationship between construction tradesmen and their personal comfort, this barb fell into disfavour. A CE crewcab is a Base Construction Engineers truck used to transport construction engineer tradesmen.

⁸ *Ubique* July 2001.

<i>Construction Technician</i>	648	<i>Amber</i>
<i>Construction Engineering Superintendent</i>	649	<i>Green</i>
Fire Fighter	651	Green

It is of note that all of the construction trades are considered in the red, or in a “critically under strength” condition, less only two with one of those only making it to amber or “severely under strength.” The reference identifies the recent move of the Canadian Forces School of Military Engineering (CFSME), the attractive outside market, a recent redefinition of the trades and high operational tempo as the main reasons why these trades are suffering. In fact it was stated in the *Minutes of the MOC 640 Working Group (WG) Held at 1 CAD HQ Room 24-25 Oct 2000* that “We <the CF> need to increase production [of tradesmen] as we are losing our personnel at twice the rate of production.” The *Ubique* article goes on to specify a considerable number of initiatives designed to enhance production of trained personnel to fill existing vacancies. It is made clear, however, that recovery of these trades is not going to occur in the short term and that over the long term increased depth is required in order to share the operational burden to prevent a reoccurrence of the current situation and to maintain the overall health of the trades.

Numbers taken from a 2001 briefing provided by the 640 series career manager would indicate that the Regular Force has 893 positions established for the combined total of the trades shaded in Table 1. In 2001 the CMIS database showed only 783 or about 90% were filled and it is anticipated that the CF will be losing about 5% of the trained strength in 2001. While not as apparent percentage-wise the impact of these shortages on a small and highly deployed trade are

enormous. This is further exacerbated in that the 649 trade, which comprises rank levels WO-CWO⁹, is the only trade rated green and it is in the least demand for deployments.

The Minutes of the First MOC 640 Working Group (WG) Held at NDHQ 12 ST Conference Room on 12 April 2000 indicate that all QL5 MOC 640 trades are critical for manning. It was noted in an article entitled *VCDS Military Occupation Structure (MOS) II Review* that there was a particular requirement to stabilize and increase the military essential MOC 640 trade numbers given the current and anticipated operational tempo.

Summary

While structurally the 640 series engineers are found throughout the CF, any solution which can assist in improving any part of the picture (i.e. the Army's capability) will assist in improving the overall situation. The point to note is that if the CF force structure was to increase the number of the personnel within these occupations, especially once steady state production caught up, the overall health of the sustainment engineer organizations would be much easier to maintain.

Military occupations are particularly vulnerable to crisis when they are only held in small numbers. The CF's ability to sustain deployed operations would benefit from more 640 series tradesmen. What is therefore needed are more 640 series occupational series tradesmen. The Reserves, as we shall soon see, require both achievable and essential roles. This Chapter has clearly answered "why" one might consider developing R640 series construction trades.

Chapter 3

The Strategic Context For Change

"...The Government recognizes that a greater proportion of the Reserves' resources must go towards improving their operational capability and availability. In particular, the Militia structure requires attention and rejuvenation to ensure that units are more efficient and better able to contribute to the Total Force concept. Consideration will also be given to assigning more

⁹ All 640 series tradesmen become 649 upon promotion to WO

service support roles - such as medical, logistics, communications and transport functions - to the Reserves..”

The 1994 White Paper on Defence

Introduction

This chapter will describe the strategic context in which changes to the Reserve Force must occur. It will be demonstrated that the timing is ideal to introduce new capabilities which provide complementary or supplementary capabilities¹⁰ into the Reserve Force which are both achievable and relevant.

Government Policy

The *Auditor-General's Report* released in 1992 urged that there be improvements within Canada's Reserve Force. The extract above which was taken from the *1994 White Paper on Defence* clearly demonstrated that the Governmental Policy of the day reflected this requirement. While the *White Paper* was generally on target, the Special Commission on Reserve Restructure (SCRR) reported in 1995 that there were a number of refinements required to ensure that the policy continued to reflect the needs of the institution. Further attention has been drawn to the matter by the Special Commission on Veteran's Affairs (SCONDVA) and further SCRR reporting over the interim period up to the present.

The Departmental Response

Receiving guidance from Governmental policy which was being continually refined, the Departmental understanding of the situation evolved as well. This is particularly well laid out in

¹⁰ Complementary skills are those not normally available to the Regular Force and which provide additional breadth of capability, while supplementary skills are those already available in the Regular Force, but in areas where the Reserve Force is needed to provide additional depth (augmentation and sustainment) VCDS *Rethinking the Total Force: Aligning the Defence Team for the 21st Century*.

themes extracted from the VCDS paper *Rethinking the Total Force: Aligning the Defence Team for the 21st Century*, which follow.

The cold war resulted in the traditionally mobilization-based Canadian military becoming a force-in-being with emphasis on high-readiness regular forces. For four decades Canada maintained its best-equipped, highest-readiness troops in Europe whereas the Reserves were largely left out of the strategic planning and force development process and were relegated instead to secondary or non-operational roles.

However, meeting the current steady flow of operational commitments requires that the Defence Establishment be designed to maximize the utility of its entire structure. Canada does not wish to afford the full-time, high-readiness force structure that would be required to enable the Canadian Forces to meet all of its commitments from within the standing force. As such, the Canadian Forces have adopted a risk-management force generation model that requires generating some of the necessary operational capabilities using part-time personnel. Under current policy, the Regular Force is tasked and designed to provide rapidly-deployable forces for combat, combat support and combat service support, while Reserve forces are looked to for the provision of complementary and supplementary skill sets. What is most important is that the Reserves are fully integrated into the Defence Establishment.

The *White Paper* established a policy foundation for aligning the Regular and Reserve components towards a Total Force. The Reserves were assigned the operational role of providing "augmentation, sustainment and support of deployed forces" together with a review of the function of the Militia, with a view to assigning more service support roles (such as medical, logistic, communications and transport functions). The Commissioners, in essence, were trying to come to an accommodation between the present and pressing need to structure the Reserves to

meet the day-to-day operational needs of the Canadian Forces, and strengthening their role as the basis for national mobilization in the event of an emergency.

At present, the Militia structure is for all intents and purposes the remnant of the Army that fought the Second World War (see Table 2). The structure is heavy in combat units: infantry, armour and artillery account for 88 out of 133 units, or two-thirds of the total strength of the Militia, while engineer, service support and medical units comprise the remaining one-third. While no doubt appropriate to a Second World War-era infantry-heavy mechanized conflict, this structure does not reflect current operational requirements.

Table 2: Current Structure of the Militia¹¹

Branch	LFAA	LFQA	LFCA	LFWA	Total
Armour	2	4	6	6	18
Artillery	3	3	6	7	19
Infantry	8	12	20	11	51
Engineer	2	3	2	5	12
Service	5	2	6	7	20
Medical	1	3	3	6	13

¹¹ VCDS *Rethinking the Total Force: Aligning the Defence Team for the 21st Century*.

Operational demands are today weighted far more heavily in favour of combat support and combat service support organizations - logistics functions, communications, medical services and engineer support - than at any time in the past. The nature of current operations places a premium on support services and, as a result, the Regular Force has found itself to be deficient in these areas. Due to the twin requirements of policy and operational capability, however, the Regular Force must continue to maintain high-readiness combat units in order to meet the need for stand-by forces, and simply does not have the resources to provide the additional service support forces as well.

Current Defence Planning Guidance (DPG)

Consistent with these desirable and necessary changes, and articulated within DPG 2001 are the relevant CLS Goals in support of CF Change Objectives.¹² Together these objectives spell out “change the Army” and “change the Reserves” - and soon.

- a. Transitioning the Army. Implement an Army transition plan. Transition dates to be determined and articulated in DPG 2002; and
- b. Land Force Reserve Restructure (LFRR). Commence realignment of Army Reserve structure (LFRR) in accordance with approved strategic goals and objectives identified for 2005, with a view to achieving complete alignment with departmental force structure goals by 2010. An initial cycle of implementation is to be completed by September 2003.

Army Transformation

¹² Within *DPG 2001*, there are two main agendas to ensure the force can cope with the needs of the day as well as prepare for the future referred to as the “*sustaining*” and “*change*” agendas respectively (pp 1-10).

Mandated within the DPG and enshrined within the Army *Land Force Strategic Direction and Guidance (LFSDG)* are the notions of Army Transformation and Mobilization Planning. While the ongoing Army Transformation process has so far been done in parallel but not in consultation with LFRR, the future LFRR consultative process will be coordinated with the Army Transformation process. The Army Transformation is driven by the demands of force modernization and current fiscal realities and will be dependent on the complementary and supplementary capabilities of the Reserves. Both Regular and Reserve components of the Army must be transformed in concert to increase its sustainability.¹³

Mobilization Planning

Also mandated within the DPG is the requirement to conduct Mobilization Planning. Mobilization is defined as “the process by which the Armed Forces or parts thereof are brought to a state of readiness for war or other national emergency”. The CF approach envisions four stages of mobilization, spanning the full spectrum of progressively larger military engagement from routine force generation activities in Stage 1 to full national mobilization in Stage 4. The mobilization policy base and CF concept consist of the following:¹⁴

- a. Stage 1 (Force Generation). Routine force generation and force employment activities to achieve government policy objectives.
- b. Stage 2 (Force Enhancement). Employment of existing forces, with up to 20% Reserves to conduct contingency operations at the Brigade Group level.
- c. Stage 3 (Force Expansion). Consists of measures to sustain forces committed in Stage 2 for a additional 60 days of combat, and an undefined period in theatre.
- d. Stage 4 (Full National Mobilization).

¹³ DPG 2001 (pp 1-15).

¹⁴ DPG 2001 (pp 1-19 to 1-21).

Within the *DPG* and the *LFSDG* it is apparent that while the structure of the Reserve Force must cater to the full spectrum of Mobilization Planning, it is clear that the Reserves will have an important and continuing role in supporting the requirements within the first two stages. In other words, the requirement to assist in sustaining the current level of operational rotations is not expected to change significantly in the near future.

Demographics

The current situation in many Reserve units is described in LCol Kampman's article found within *Transforming an Army: Land Warfare Capabilities for the Future Army*¹⁵ on Future Army Reserves. According to LCol Kampman "They do not have the relevant equipment, nor in many cases are they following relevant military training. Competing civilian careers are becoming a greater problem for senior people. There are some significant opportunities on the horizon for the Reserves; newer evolving roles suited to civilian skills... At the last turn of the century, the regulars provided the bulk of the technical skill sets in the army, specifically engineering and artillery. The Reserves on the other hand provided the bulk of the tactical skill sets in the army, largely because of the transferability of skills and the specialized expertise required in the technical branches. At this coming turn of the century, it is now the opposite, The Reserves have the potential to provide the bulk of the technical skill sense. Because of the specialized nature of tactical expertise, we really require full time soldiers and full time expertise to be able to do that sufficiently. If we look at technical and tactical training in the combat branches, individual training is relatively short, but it takes an extended period of time at required training level to build the necessary combat teams, battle groups and brigade groups to be proficient. For technical branches it is the opposite. They require extended periods of individual training. But to build effective service support units, it takes a much smaller period of

time because service support units are collections of individual skills coordinated. Again the two sides are opposite: longer individual training, shorter collective versus shorter individual training versus longer collective. Focus on the increasing costs of combat skills. There is no doubt that combat equipment is becoming more complex and more costly and therefore more rare. These factors are driving an increasing complexity and specialization of skills and training costs.” In other words, modern recruits tend to be more readily adaptable to support trades than as infantry as was the case in the balance of the previous century.

Land Force Reserve Restructure (LFRR)

*“Every country has an Army: ...
Either its own or someone else’s”*

Sir Winston Churchill

“The Army Reserve (Militia) is a valuable national institution and a portion of the operational capability of the Army and Canadian Forces. It forms a valuable link to the communities in which the Reserves are located, and remind Canadians of the essential role that Canada’s military plays in the country. To even have an Army Reserve is a national strategic decision aimed at ensuring Canada’s ability to maintain sufficient military strength to conduct current operations, both at home and abroad and to act as a base upon which expansion could occur. The need for a capable Reserve is significant when viewed in combination with an overall reduction in strength levels, the current operational tempo of the regular Army and the response to domestic operations on a near-continual basis. The administration and training of the Army

¹⁵ DLSC *Transforming an Army: Land Warfare Capabilities for the Future Army*¹⁵ (pp 55-58).

Reserve needs to be improved and innovative recruiting and retention initiatives must be aimed at improving its capability, sustainability and effectiveness.”¹⁶

In line with this assessment, the *LFRR Strategic Plan* is the result of intensive consultation with Reserve and Departmental organizations which lays out the strategic framework describing the necessary conditions to modernize, revitalize and improve the capability of the Army Reserve. The Strategic Plan was formulated within the parameters of current Governmental Policy articulated within the *1994 White Paper on Defence*, Departmental Policy such as *Strategy 2020* and *Defence Planning Guidance (DPG 2001)* and as well takes into consideration the Army’s most recent strategic direction contained within the *Land Force Strategic Direction and Guidance*.¹⁷

The mission statement for the Restructure of the Army Reserve is:

To develop, as part of the Army, an effective and credible Army Reserve for the 21st Century, complementary and supplementary to the Regular Force and relevant to the needs of the nation.

A key aspect of the Plan is the requirement to gain the trust of the Army Reserve to foster credibility within the overall process. This will be achieved through effective stewardship, maintaining respect for the institution and most relevant to this paper through an improved operational capability.

In order for this to work, the Plan notes that the Army Reserve must be effective and demonstrate the ability to provide relevant operational forces for the nation, based on the following elements:

¹⁶ *Land Force Reserve Restructure Strategic Plan* (pp ii-iii).

¹⁷ Taken from the official executive summary of the *Land Force Reserve Restructure Strategic Plan*.

- a. Essential. The Army Reserve must possess the essential capabilities required for growth in response to mobilization and for augmentation to the Regular Force.
- b. Capable. The Army Reserve must be truly capable and employable within the timeframes expected by government.
- c. Adaptable. The Army Reserve must be able to adjust to evolving military imperatives, initiatives, technologies and requirements.
- d. Effective. The Army Reserve must be able to achieve and maintain quantitative and qualitative performance objectives.
- e. Efficient. The Army Reserve must maximize the use of available resources to perform it's roles, missions, and tasks.
- f. Relevant. The Reserve and Regular components of the Army must be complementary, supplementary, and mutually supportive.

The Army Reserve must be made to be sustainable and remain healthy while fulfilling it's assigned roles, missions and tasks. For the Army Reserve this implies:

- a. Build on Community Strengths. The Army Reserve must be able to maximize community support and resources to sustain it's operational capability.
- b. Leverage Available Expertise. The Army Reserve must take advantage of available local community expertise to augment the breath and depth of operational capabilities of the Army.

The Army Reserve must have sufficient materiel and materiel support to maintain the level of training and administration required by their roles, missions and tasks. The Plan further notes that "Army Reserve friendly" policies and procedures must be put in place that recognize the true part time, voluntary nature of the individuals in the organization. Vital to achieving a

sustainable Army Reserve is an effective system of recruiting and training that ensures the highest possible retention of personnel. The Army Reserve must be seen by all Canadians as an organization where they can gain valuable and varied experience and can serve their country. Service in the Army Reserve must be interesting, mutually beneficial and rewarding to the individual. In short, the institution must offer new experiences, the opportunity to learn useful and rewarding skills and earn appropriate compensation if it is to attract and retain quality people. It must also ensure the recognition, acceptance and use of civilian skills, qualifications and knowledge.

The Fraser Report

To further demonstrate both consistency and timeliness a recent report entitled *In Service of the Nation: Canada's Citizen soldiers in the 21st Century - The Fraser Report*, issued in 2000 contains the following related recommendations:

- a. Recommendation 3. Outline proposed roles for the Reserves in general terms, including the introduction of non-traditional roles. Explain in common-sense terms why these changes are necessary under present and foreseeable conditions...
- b. Recommendation 4. Acknowledge that NDHQ (i.e., the Regular Force) understands the different nature of Reserve service (part-time, voluntary, limited commitment) and will design roles, standards and training regimes that take it into account. Consider new terms of engagement for reservists that may be needed to attract persons with developed skills in the civilian economy (e.g., civilian-military co-operation, psychological operations, vehicle maintenance). For this reason, we urge serious and urgent study of alternative terms of service, including those that may require legislative amendment. Revisit those SCRR

recommendations which were initially rejected by the Department, such as contractual obligations and job protection legislation.

Summary

Since at least 1992 there has been considerable political interest in creating a more effective and efficient Reserve Force which can contribute to the overall capability of the CF. Within Governmental policy documents and within the Department we see a clear linkage and an understanding of the changing, and perhaps growing relevance of the Reserve Force - in particular in its ability to generate combat support (CS) and combat service support (CSS) capabilities. The validity of this is even further supported both in analysis of current and foreseeable Army structural requirements and as well in an analysis of current demographics. While there has been some progress it is admittedly a slow, emotional and consultative process which requires careful thought and implementation. The mechanisms for change are in place however, and there is a clear direction and mandate to proceed with changes which will improve the lot of the Reserve Force and the CF. As will be described later, initiatives similar to the creation of 640 series trades are already underway within the Reserve Force. It is therefore highly unlikely there would be any serious political or Departmental challenges to this initiative. If the previous chapter described “why” one might consider developing R640 trades, then this chapter has demonstrated “when” to act on this initiative, and in fact, the time is now.

Chapter 4

Current Models

*A wise man learns from his experience;
A wiser man learns from the experience of others.*

Confucius

Introduction

Previous chapters have helped us to understand what we need to do (i.e. create R640 tradesmen) and why and when we need to do it. What is now required is a look at the feasibility and the achievability of the concept and how it might best be accomplished. In order to better understand what models were available on which to base further understanding, and to use for planning and comparison purposes, a survey was conducted across various components of the Canadian Forces and several allied armies. The survey, which was sent out under cover requesting responses to the proposed questions is included as Annex A. Based largely on the results received are the following descriptions of several allied army models, other Canadian models of interest, and a particularly robust presentation of the 14 Airfield Engineer Squadron's (14 AES) methodology, because of its enormous similarity to the concept under consideration.

The United Kingdom

On 8 July 1998, the Blair government released a Strategic Defence Review White Paper (SDR) entitled *Modern forces for a Modern World*.¹⁸ Heavy cuts to the strength of the Territorial Army (TA)¹⁹ were to be offset by increasing readiness levels, recruiting and manning standards, training and equipment in order to enable TA units to be capable of being quickly incorporated into Regular force organizations. The ultimate goal of the restructure process was to

¹⁸ VCDS *Rethinking the Total Force: Aligning the Defence Team for the 21st Century*.

"modernize and enhance the TA to make it more readily deployable and usable" in the context of current operations. "The end result of this restructure will see a significant increase in "the involvement of the [TA]...in supporting rather than combat roles, with regulars and territorials acting as a wholly integrated force."

According to the VCDS *Rethinking the Total Force: Aligning the Defence Team for the 21st Century*, the SDR aims to rejuvenate the Reserves, and particularly the Territorial Army, by giving them new roles and integrating them more closely with the Regular Army, with primary emphasis on key support and medical tasks.

This UK policy bears a striking resemblance to Canadian policy guidance described earlier in this paper. Contact was established via the offices of the Engineer in Chief to 29 Engineer Brigade in Aldershot, UK. The TA do have artisan or construction engineer units within their structure. Most skills are brought in by members upon enrolment, with only minimal engineer trades training available within the TA. A number of community projects are completed for training purposes, however, minimal training time per year in units is the TA norm. The training and retention problems are similar to the Canadian Militia as a whole. The relevant notion is that a similar nation with extremely similar views on structuring of their Regular and Reserve Forces with a similar record of extensive overseas operations chooses to maintain Construction or Artisan Troops within their Reserve Force organization.

The United States

According to the CFLO at the US Army Maneuver Support Center, Fort Leonard Wood, USA the US maintains construction tradesmen both within the United States Army Reserve (USAR) and within the National Guard organizations: "The attraction of training a young man in

¹⁹ The UK TA is roughly the equivalent of the Canadian Militia.

a trade is definitely something that brings in recruits.” Whereas formal training for construction engineer reservists in the UK is limited to collective training opportunities, both the USAR and US National Guard both conduct courses and collective training.

It is also notable that the Clinton administration's 1993 “Bottom-Up Review” has resulted in an Army Reserve with an almost exclusive combat support and combat service support function.²⁰ The Army Reserve now offsets shortfalls in these skills in the regular force and frees up regular force manpower for rapid-deployment combat roles. Thus, while the Army Reserve represents only 4 percent of the total army combat structure, it represents 36 percent of its combat support and combat service support structure. Again, we see a modern western nation with a shared vision on the role of the Reserves in regards to Combat Support and Combat Service Support choosing to create and maintain a sustainment engineering capability within their Army Reserve.

Australia

The similarities between Australia and Canada are perhaps even more striking than in the previous examples. The geographic, equipment, structure, military budget and roles are very comparable. Again, according to the VCDS *Rethinking the Total Force: Aligning the Defence Team for the 21st Century* – Australia intends on "using part-time and full-time personnel in fully integrated task forces [as] a central part of [the] plan to restructure the Army." Contact with the Australian Forces Land Command Engineers confirms that they too choose to maintain a sustainment engineering capability within their Reserve Forces.

²⁰ VCDS *Rethinking the Total Force: Aligning the Defence Team for the 21st Century*

Summary of Nations

These examples are by no means finite as there are a number of other modern western nations which find utility in creating and maintaining sustainment engineers within their force structures. What is clear from this analysis is that:

- a. Introducing R640 engineers is a relevant and achievable goal.
- b. Most modern western nations are leaning towards a more robust CSS and CS capability within their Reserves.
- c. The Canadian situation has a similar flavour to many like nations who choose to develop and maintain construction engineers within their Reserve Force.

Other Militia Models

A cursory overview of the current Militia models within Canada reveal no hidden dynamics as to why this capability would be any less successful than the currently existing units and occupations. On the contrary, current initiatives associated with the Army Transformation are developing CIMIC, Psychological Operations and NBC Defence Units capabilities. If nothing else the work done in this regard will pioneer the route to a successful creation of a new military occupation within the Militia. It is excellent timing to introduce valuable capabilities into the system while the political willpower and the mechanisms to support change are in place as they are now.

The Naval Reserve

It has been said that “the navy mans equipment while the army equips men”. The enormous success of the Canadian Navy in almost exclusively manning the Marine Coastal

Defence Vessels (MCDVs) with Naval Reservists, while interesting, is too “narrow in scope” to be of direct use in this study. The key lesson, however, is that the Navy have found a way to be successful in assigning a task with reasonably high readiness requirements to their Reserve Forces within the context of the Canadian environment.

14 Airfield Engineer Squadron (14 AES)

“Of particular...note to the Army is the fact that the concept demonstrated the effectiveness of our C2 in spite of the geographic separation....We effectively managed trades training and career progression as well as maintained our military skills and readiness at a higher than normal level...”

Major Yarema, Past Commanding Officer (CO) 14 AES

While the Air Force could also be accused of manning equipment, their approach to the employment of Air Reserves differs greatly from the Navy. Whereas the Navy has provided an operational role for formed Reserve units, the Air Force generally employs their Reserve personnel on a individual sustainment basis. What is of greatest interest to the Army, however, is the Air Reserve unit of 14 AES in which the Air Force has set out to create R640 series tradesmen within the Air Reserve.

The Airfield Engineer Reserve Program was created in 1994 to develop a Reserve capability to support deployed Air Force operational missions. Rather than a traditional approach, the Air Force chose to employ a partnership approach to contracting support for Airfield Engineer Flights (AEFs) which has been very successful. The community-based partnerships have developed strong relationships between the AEFs and the communities, and have proven to be very efficient. Both parties have benefited greatly from this relationship and strong support exists within the communities for the AEFs. In a Briefing Note prepared for the Honourable J.A. Fraser in March of 2000 the following points were raised “...The AE Reserve

program is not a local employment or trade education scheme although these aspects of the program have had tremendous spin-off benefits in host communities... Through the establishment of Air Reserve units the Air Reserves have rejuvenated the concept of closely integrated, community based Reserve units. The AE Reserve program gained a firm foothold in four communities through the tendering of Public Works and Government Services Canada (PWGSC) of remunerative (cost plus) partnership contracts for the provision of administrative, infrastructure, vehicle and other support. Also stipulated in these contracts was the Partner's responsibility to pro-actively promote the unit in the community ...successful out-of-service training program (apprentice level) at local community colleges."

The structure of 14 AES²¹ is of considerable interest to the overall concept and success of the initiative employed by the Air Reserves. The current structure consists of:

- a. 143 AEF Lunenburg County, the first Reserve unit, was established in Sep 94 with the contract awarded to the Lunenburg Municipal Industrial Commission.
- b. 91 AEF Gander was established in Feb 95 with the contract awarded to the Gander Reserve Support Corporation.
- c. 14 AES HQ Lunenburg County was established in Sep 95, is co-located with 143 AEF and shares the same partner.
- d. 144 AEF Pictou was established in Nov 95 with a contract awarded to Horbasz-Drysdale Partners Inc.
- e. 192 AEF Abbotsford contract was awarded to School District # 34, Career Technical Centre, Abbotsford BC in Jan 96.

The partnership arrangement that underpins the AE Res concept forms the basis for mutual benefit to the partners. By establishing community-based Reserve units across Canada

the Air Force expands its links to grass roots Canada and develops a presence in areas where the Air Force has no other ongoing presence. The Air Force also develops an increased operational capability and improved technological base through its relationship with community colleges and current trades training programs. The program was compared to traditional Reserve programs and the cost of increasing the regular force and was found to be very efficient. In addition to avoiding a \$10 to \$12 million capital cost reduction for facilities (at \$3-5M each), the O&M costs for the program are significantly lower (four to six times lower) than traditional Reserve O&M costs. The efficiency of the partnership relationships and sharing of facilities with non-defence activities are contributing factors in these reduced costs. Another benefit of the leasing arrangement is flexibility. Units can increase or decrease the number and size of facilities as the unit grows in size and requirements or the need for infrastructure diminishes.²²

At the same time the community partner gains the social and economic benefits of a part-time and full-time employer, receives technical and leadership skills development in the local population. In addition to the roughly \$1 million annually that is spent locally to support an AEF, the flight completes community based projects which support their training program.

Each of the four AEF and the 14 AES HQ partnership contracts were established through a separate PWGSC open bidding process. Industries and related businesses were asked to provide suitable accommodation, furnishings, computers, vehicles, tools, heavy equipment, and miscellaneous materials or services to support the Reserve unit. DND would reimburse the partner for actual purchase and lease costs plus a General & Administration fee. The successful bidder would provide access to their company's qualified trades personnel for recruiting purposes for this project and play a lead role in developing and utilizing AE reservists.

²¹ 1st Canadian Air Division 788—1 (A4 AE Ops 4) 9 Nov 99 *Air Reserve Review Report*.

²² 1st Canadian Air Division 788—1 (A4 AE Ops 4) 9 Nov 99 *Air Reserve Review Report*.

The community-based partners²³ have fully demonstrated their desire to provide excellent co-operation to their Reserve unit. The reason for this excellent co-operation is the attitude of the partner. The community-based partner has a symbiotic relationship with the AE Res unit whereby the unit provides valuable economic benefits and part-time employment and training to its younger citizens. After unit start-up the community-based partner continued to seek new levels of community participation and interest in the Reserve unit. The community-based partner quickly established and monitored an effective advisory board comprising of respected citizens and business people who successfully promoted the unit to it's citizens as belonging to the community and worthy of their interest and source of community pride. The advisory boards were active in providing in-roads to local businesses and schools to assist recruiting efforts and also provided assistance in accessing community projects.

Summary

What is made abundantly clear within this chapter is that the feasibility of creating and training R640 series construction engineer tradesmen within the Militia is largely without doubt. A number of other modern western nations all different, yet each similar its own right, have arrived at the independent but common conclusion that it makes sense to do so within their organizations. The Militia is currently expanding roles to include CIMIC, psychological operations as well as NBC Defence units. Add all this to this a highly successful Air Force example of a possible methodology of what is intended to achieve within the Militia, and the question really becomes “how” creating a R640 series capability might best be done, vice whether or not it is feasible and/or achievable.

²³ The second type of partnership under trial was based on privately owned business ventures and was not nearly as successful for various reasons. This method was not recommended for further pursuit within the study.

Chapter 5

Enablers

Enable: To make possible.

The Oxford Paperback Dictionary

Introduction

Regardless of which methods might eventually be considered, Canadian cultural values, politics, history and the current military institutions themselves constitute the basic environment in which all developments must occur. Nothing here, however, precludes creative, new ideas from achieving success. Quite to the contrary, there are a number of broad initiatives described within this chapter which (while remaining within the confines of the environment) have great potential for success. These initiatives provide not only useful considerations for our purposes, but equally demonstrate the current corporate will to achieve success. While not solutions unto themselves these type of initiatives represent the type of enablers fundamental to the overall success of any program within the Reserve Force. It is most certainly of value to understand the current environment, and as stressed by Col D. Fraser, the PD LFRR, greater potential for success exists when programs are nested within higher Governmental goals such as job creation, success of LFRR as a whole and/or social or economic improvements in the North.

Recruiting and Retention

The 14 AES experience showed the percentage of trained recruits enrolled to be below desirable levels as per Table 3. The goal of recruiting up to 80% qualified personnel has not been achieved. In those units where a high percentage of enrollees were fully qualified the majority of those were annuitants.

Table 3 - Percent of Trained Recruits²⁴

Operational Capability Goals															
Goals	Units														
	91 AEF			143 AEF			144AEF			192 AEF			14 AESHQ		
Recruiting totals by unit	US	SS	S	US	SS	S	US	SS	S	US	SS	S	US	SS	S
	*	**	***												
	26	17	20	38	7	10	17	18	12	11	12	30	0	0	9
% skilled recruits	32%			18%			27%			57%			100%		

* Unskilled - Recruits have neither Basic Recruit Training (BRT)/General Recruit Training (GMT) or skills training

**Semi-skilled - Recruits have one or both types of training (military or trade) but not to deployable standard

***Skilled - Recruits have journeyman qualifications and BRT completed.

Problems like these, and ones which are similar in nature have not gone unnoticed thus one of the current initiatives to enhance recruitment is the potential for a recruiting bonus. To attract skilled NCMs to specialized occupations, the CF is offering recruitment allowances to new enrollees, re-enrollees and to Reserve Force members who component transfer and who: have a post secondary diploma or certificate which allows them to bypass portions of the military's technical training programs; are civilian trade qualified or are military occupation qualified. These personnel may be offered up to \$20,000 as a signing bonus.²⁵ While not a new concept, it is new to the 640 series trades. All CF MOCs categorized as either Red or Amber

²⁴ Source of data: AEF/AES HQ unit records.

²⁵ *Canadian Forces Personnel Newsletter* (pp 8).

will be eligible for the Bonus.²⁶ The enhanced recruiting program would involve a bonus to any candidate currently holding a civilian journeyman license to join the CF. While these are aimed primarily at the Regular Force their adaptation to the Reserves would be equally valuable. Perhaps even of greater value would be to follow the Australian model whereby Reserve service income is tax exempt and does not impact on income from other social programs.²⁷

Training

The *Minutes of the MOC 640 Working Group (WG)Held at 1 CAD HQ Room 24-25 Oct 2000* described the Out Service Training (OST) set up for the Reserve MOC 640s. “There have been a number of combined OST courses already. This is a win/win situation as it optimises course-loading requirements and serves to alleviate the production problems Canadian Forces School of Military Engineering (CFSME) is facing. CFSME is also examining other options such as Out Source Training (OST) of some of the QL3 training in a community college venue, as reinforced by the success to date by 1 CAD/A1 Reserve Training Management who have sponsored Primary Reserve MOC 640 courses for all six of the feeder trades.”²⁸

A training cost comparison was made between the regular force and reservists in the AE trades. The AE Res trades training is primarily accomplished at community colleges whereas the regular force training is accomplished at CFSME. The cost for this training is detailed in the table below by MOC and reflects the current unit costs (i.e. per student).

Table 4 - Comparison of QL3 Training Costs²⁹

QL3 TRAINING COSTS - 640 TRADES		
<u>TRADE</u>	<u>CFSME</u>	<u>OST</u>

²⁶ *Minutes of the MOC 640 Working Group (WG)Held at 1 CAD HQ Room 24-25 Oct 2000.*

²⁷ Briefing to CFCSC CSC 28 by Australian Army student Major Rod Francisco 06 Mar 02.

²⁸ *Minutes of the MOC 640 Working Group (WG)Held at 1 CAD HQ Room 24-25 Oct 2000.*

²⁹ 1st Canadian Air Division 788—1 (A4 AE Ops 4) 9 Nov 99 *Air Reserve Review Report.*

QL3 TRAINING COSTS - 640 TRADES

<u>TRADE</u>	<u>CFSME</u>	<u>OST</u>
641 - RM Tech	\$ 57,200	\$ 19,011
642 - ED Tech	\$ 34,006	\$ 16,080
643 - EGS Tech	\$ 37,806	\$ 15,234
646 - PH Tech	\$ 39,325	\$ 25,500
647 - WFE Tech	\$ 53,018	\$ 30,144
648 - Const Tech	\$ 65,977	\$ 30,237

The costs shown in the out service training (OST) column reflect the costs from contracts with community colleges to deliver a QL3 level course in the applicable trade to primary Reserve specifications. The cost for contracted OST is approximately half that of CFSME run courses. For students attending a normally offered and delivered course at a local community college leading to an apprentice designation and eventually to journeyman certification, costs would be substantially lower. The content and length of the regular force courses and the instructor overhead are the principle reasons for the CFSME courses being so much more costly.

In a 2001 Press Release entitled *The LFRR Strategic Plan and the Reserve Soldier*, action was cited which would in 2001 improve access to Distributed Learning, provide new course qualification standards which better cater for the realities of part-time Army Reservists and allow for improved use and transferability of civilian qualification in the Army Reserve.

The group Reserves 2000 has done some work on this area and offers the following advice for support trades training: “It is evident more support trades are required from the Militia to augment the Regular Force. Current training policies, however, make it very difficult

to qualify trades personnel...Prior Learning Assessment and accreditation could be utilized to shorten the training period for support trades recruits who are older and established in their trades...Perhaps faster advancement³⁰ (rank and trade qualifications) might compensate for army/civilian duplication. Accreditation programs with Community Colleges could be established, to mutual benefit..." Recommendations provided include:

- a. Training for reservists should be planned to take the special character of reservists, including the life cycle of reservists, into account.
- b. Training must encourage the enrollment of Canadians who are not students into the Militia.
- c. Training courses must be modularized and offered in the smallest segments possible, ideally of weekend length, to allow year round production, especially of leaders.
- d. As much training as possible must be accomplished locally.
- e. The use of simulation must be maximized.
- f. Credit for prior and civilian learning and acceptance of CSS trades training at local learning institutions must become standard procedure.

There are a multitude of ways in which efficient effective training can be delivered. It must, however, be delivered and it must fit the context into which it must service Reserve clients.

Bureaucracy

The bureaucracy is a double edged sword in that it provides the necessary framework for large organizations to exist and function in a coherent manner. At the same time it can, by its very nature impose restrictions on seemingly worthwhile ideas. The key is to work effectively

³⁰ Perhaps lateral trade progression might be a better solution as it allows for increased financial compensation but

within the confines of the institutional bureaucracy, seeking change where it is essential yet understanding the overall value of the framework provided. An example of this is the Canadian Forces ongoing conduct of a thorough review of the Regular Force Terms of Service (TOS) along with a concurrent review of the Reserve Force Employment Policy. The objective of the latter review is to enhance the compatibility of Regular and Reserve Force personnel policies and to increase the capacity of the “Total Force” to achieve its mission.³¹ In other words the bureaucracy can change if warranted.

The TOS study that is sponsored by Director of Policy and Analysis Development will try to determine if the current TOS are sufficient in their capacity to maximize the operational effectiveness of the CF while, at the same time, recognize the needs and aspirations of CF members. It is anticipated that modifications to the TOS are likely and will result in a better utilization of our personnel by the CF.³²

Summary

There are a host of ongoing and potential methodologies which can increase the likelihood of success of Reserve programs. They vary by region and perhaps the level within the chain of command in which they would require approval for implementation, but clearly demonstrate the degree of flexibility that is possible under current conditions. The main point is that a number of these enablers are being implemented right now, and not only might these be useful for our purposes but they demonstrate the current corporate determination to change the system. What is required is to choose which ones would work to our advantage, or develop new ones which do. As long as ideas are not in direct conflict with the basic tenets of the “Canadian

precludes the need to place personnel into leadership positions for which they are not prepared.

³¹ *Defence Planning Document 2000* (pp 7).

environment” they have a high degree of potential for success and thus contribute to the overall goals.

Chapter 6

Discussion

*...But, mousie, thou art not alane,
In proving foresight may be in vain,
The best laid schemes of mice and men,
Go oft astray,
And leave us nought but grief and pain,
To rend our day....*

Robert Burns

Introduction

Previous chapters have responded to the questions relating to why, when and whether the initiative to add R640 trades into the Militia should be undertaken. The only question left to be answered is how and perhaps where. Rather than directly answer this question which is beyond the scope of this paper, the intent of this chapter is to distill out from the information gathered a set of principles to be followed in order to achieve successful implementation. Much of this information has been developed in earlier chapters, however, some of it is developed below.

Ten Principles for Successful Implementation

1. Avoid Resistance to Change. Ensure the engagement of the Reserve Community and seek volunteers where established units are affected. “The modern practice of honorary regimental appointments dates back little more than a century, and it was probably not until after the First World War that the concept of the honorary appointee being a source of practical and moral support for his regiment, became widely established.... open to non-military persons - who could supply money, influence and enthusiasm in return for the distinction conferred by

honorary military rank - [which] both reinforces the regional nature of the Militia and distinguishes between the roles of honorary appointments in the Regular Force and the Militia.”³³

In a paper written by Major J. Hampson an interview was conducted with Honourary Lieutenant Colonel (HLCol) McCandless of 31 Combat Engineer Regiment (The Elgins):

“When I commanded 22 Service Battalion in London in the eighties I received a call from the District Commander, one of my former COs. The Federal Government was making loud noises about closing CFB London. I was told to call my Honourary Colonel, who had really done little for the unit, and tell him that DND needed help to save Base London. My Honourary and I spoke for about fifteen minutes and he said he would get back to me. A couple days later his secretary called and said to be at the London Club for lunch next week. I arrived to find my Honourary, the District Commander and the Minister of Defence. We gave orders to the waiter and my Honourary leaned over to the Minister of National Defence and he said “I’ll make this brief so we can get on and enjoy our lunch. Mr Minister, you close Base London and the Liberals will not elect another member here for two decades. Do you understand me?” The Minister assured him he understood. You know what? It was a great lunch, I never saw a single word in the media that the Minister of National Defence had visited London nor was there another word about the closing of Base London until we had a different Government...”

This describes the danger of attempting to foist change upon the Reserves of which they do not like nor feel that they have been a part of developing. A further interview with HLCol McCandless reinforces this fact, and presents an example of the power of the Reserves to affect change should they perceive it to be in their best interest. “When there was talk of a major overhaul of the reserves about six years ago, Andrew (Lord Elgin), on a visit to his Regiment – The Elgins – asked if he could be of any help. I explained some of our concerns and he

³³ http://www.armee.mdn.ca/reserves/reserves/Honouraries/Honouraries_e.htm#Top

wondered if a chat with the Prime Minister might help. I suggested that it couldn't hurt so on his return to Scotland via Ottawa, he called and arranged a brief visit with the PM. Some time later the CO of the Elgins was broached with the possibility of re-rolling as Engineers. Coincidence? Who knows? But it is my sincere belief that the proper Honourary, with a sincere interest in a unit can be one of the most important aspects of any Reserve unit.”³⁴

It is clear that the Reserves as an institution are very powerful and cannot and will not be easily pushed into a course of action which they believe would be detrimental to their organization. A mutually beneficial, and agreed upon course of action must be sought.

2. Invest Properly for Initial Success. To be successful in the stand up or the restructuring of a Reserve unit the following conditions must be met³⁵:

- a. Acceptance by the unit
- b. A competent training cadre must be provided
- c. Equipment and resources commensurate with the unit's mission must be made available.

This is almost directly reflected in the *Fraser Report* Recommendation #5: “Provide reliable guarantees that the funding and equipment will be forthcoming on a continuing basis to support the new structure, including both "traditional" and "non-traditional" roles. It is important there be no tricks" in this commitment, which is bound to be scrutinized very closely.” Yet we see that in a Briefing Note to Mr Fraser, that despite acknowledgement of this requirement it can still pose a challenge “This is our [14 AES] unit's greatest weakness both in training and

³⁴ Hampson J. Maj *Restructuring Reserve Units – The Future of the Army?* Maj Hampson served as the Regular Force DCO of the Elgin Regt during their transition from Armoured Recce to Engineers.

³⁵ Hampson J. Maj *Restructuring Reserve Units – The Future of the Army?*

deployment readiness.”³⁶ There must be dedicated resources available to support change initiatives.

3. Find the right demographic and economic region and location in which to develop. The Army must enhance its recruiting base by drawing from a broader more diverse population, to successfully compete for scarce personnel resources and to maintain the necessary quantity and quality.³⁷ Within the domestic environment it will be difficult to compete with the private sector in attracting and retaining intelligent and skilled individuals. Therefore the Army must enhance its recruiting base by attracting from a broader and more diverse population, to maintain the necessary quantity and quality; must successfully innovate in terms of training/retaining personnel to compete for scarce personnel resources.

“Reserve units should be sited in areas where it is reasonable to recruit skilled civilian professionals and tradesmen.”³⁸ The emphasis should be towards providing general-purpose military training to competent professionals and tradesman, rather than recruiting unskilled CSS tradesmen. Bonuses should be offered to attract and retain qualified personnel. It is cheaper and more efficient to hire a trained specialist than to train a novice.” One of the strategic goals of the 14 AES project was to locate where they could Recruit Qualified Tradespersons with basic trade skills consistent with mobilization specifications. The choice of location is vital to overall success. Some qualities of an ideal location are: quality civilian educational facilities (community college, university), an abundance of construction tradesmen and a medium-strength economy.

³⁶ 1st Canadian Air Division Briefing Note to the Honourable J.A. Fraser (draft 8 Mar 00)

³⁷ *The Future Security Environment* (pp viii , pp 22).

³⁸ *DLSC Sustainment Capabilities for the Army of the Future* (pp 27).

4. Maximize on creative solutions. At the request of the Commander LFCA, the AEngr was to ponder this very topic and make recommendations as to its feasibility. While this is still in its initial phase some of the concepts being brought forward which bear further consideration are:³⁹

- a. Affiliating the Regular Force construction Troops with the Reserve Construction Troops or organizations on a regional basis to assist in training, projects and mentoring. The Reserve Force units could augment the affiliated Construction Troop for operations thus providing a measured input of experience.
- b. Contractors might receive preferential treatment if they accept personnel within their organizations to deploy on operations.
- c. A return to Trades Helpers whereby 041 soldiers can apprentice as a trades helper – except open it to R041s.

Potential initiatives such as these combined with those which are found within Chapter 5, Enablers, generate increased flexibility and increase many-fold the chances for success.

5. Co-locate with engineer units where feasible. As with Regular Force units there is a great deal of training synergy when combat and sustainment engineers are grouped together. Combat engineers stand to gain a great deal of expertise in the type of tasks they will often be called on to support in operations. At the same time combat engineers provide considerable “soldier” skills to the sustainment engineers. Together they create excellent capability which can undertake considerably challenging construction roles within the community to both foster good community relations and to ensure adequate training opportunities exists. As a final note this combined capability is frequently the basis for composite sustainment/combat engineer

³⁹ LCol Fredenburg LFCA AEngr reply to survey

squadrons which are deployed on overseas operations which even further supports this grouping concept.

6. Re-role existing units rather than start new ones.

“For The Elgins, and for Canada and its Armed Force, re-rolling was, and will continue to be, an outstanding success.”

LCol D.K. Nicholson, CO 31 CER (The Elgins)⁴⁰

This quote, attributable to the Commanding Officer of a recently re-rolled unit speaks for itself. This particular re-rolling event unequivocally demonstrated that where proper consultation and cooperation is achieved as well as adequate resourcing the potential for success is very high. Successful re-rolling of existing units provides several advantages in terms of existing infrastructure, military expertise, existing support structures and an understanding community.

7. Utilize existing facilities and capabilities to the maximum extent possible. Where new units are proposed, it only stands to reason to site them in locations which can be administered reasonably easily from existing support bases and establishments. While this does not preclude the idea of a more diverse or remote deployment of sustainment engineers throughout the Country, it does imply that this must be done with a support concept in mind.

8. Where appropriate; locate, set up and develop solid community based partnering relationships. A strategic goal of the 14 AES project was to establish partnerships using a competitive process to successfully deliver a cost-effective AE Reserve capability. Community interest (ownership) was achieved through advisory board. Approximately one million dollars

⁴⁰ This quote was made by Lieutenant Colonel D.K. Nicholson the CO of 31 CER (The Elgins) whose extremely successful re-rolling provides an example of the result of excellent cooperation between the Regular and Reserve

per year was to be the economic input to community. Local technical colleges are the basis of training. Heightened community recognition is achieved when the unit deploys as well as increased experience from reserves/employees upon return from deployment. OJT is easily gained through local employers. While more traditional methodologies of setting up the R640 series trades are probably easier to achieve, units in particularly remote locations could benefit greatly from the model developed and implemented by 14 AES.

9. Cater to the roles, strengths and differences in the Reserve Force. Currently, the Primary Reserve has three primary roles. First, it is to serve as the basis for augmenting the Regular Force in the first and second phases of mobilization; secondly, it is to serve as the basis for full-scale mobilization; and, thirdly, it is to serve as the link between the military and the community at large.⁴¹ Annex B describes the remainder of considerations which must be fully understood by planners. The CLS sees even greater achievements through enhancement of Militia even beyond the three primary roles: “seed the Reserves with new capabilities that...will grow in quality and quantity to from a basic capability that perhaps only the Reserves will have.”⁴²

10. Employ new capabilities early, but carefully. Build quickly on success but do not be surprised by, and be prepared to accept and deal with the consequences of any set backs. LCol Laughton, the current CO of 2 FER⁴³ notes that the requirement for R640 construction engineers is valid and that they can be quickly and successfully employed if they are initially employed in lower risk areas. In the case of 14 AES the concept was to provide an engineering capability for support to deployed Air Operations including force beddown, force sustainment, engineer

Forces and the communities in which they both serve. Taken from: Hampson J. *Restructuring Reserve Units – The Future of the Army?*

⁴¹ *Fundamental Roles of the Primary Reserve.*

⁴² CLS Press Release: *Building Effective, Sustainable Army Reserves.*

⁴³ LCol B. Laughton has extensive experience having served as the Project Director for the Engineer Support Unit development, Engineer author for Corps 96, service in 36 Engr Regt RE and 3 Fd Engr Sqn Ottawa as well as his current employment as CO 2 FER.

operations and airfield damage repair (ADR). These are challenging, yet achievable tasks and further positive conditions were set by obtaining prior agreement from local employers to authorize AE reservists time off to support operations. Units which demonstrate success should be employed early, but within their capability so as not to incur undue risk.

Summary

This chapter does not contain specific recommendations as to the best method by which R640 series tradesmen can be introduced into the Militia. Rather, 10 principles are described which can help lead towards a successful planning campaign. It is for the detailed work of an implementation team to determine exact locations and methodologies to be employed. So far, we have learned what must be done, why and when it must be done, and now have a better understanding of where and how it might be achieved.

Chapter 7

Counter Arguments

There is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new order...(because of) the incredulity of mankind, who do not truly believe in anything new until they have had actual experience of it.

Machiavelli, The Prince

Introduction

At this point it is worth considering some of the challenges associated with the concept of introducing R640 series construction engineer tradesmen into the Militia. This chapter will provide and discuss some of the pitfalls, counter-arguments or even alternate solutions to resolving the 640 series shortfalls.

Alternate Service Delivery

CANCAP (Canadian Augmentation Program) is intended to relieve the pressure on support trades on deployed operations.⁴⁴ The general idea behind CANCAP is to identify and select a prime contractor to provide CSS on deployed operations once they are established. This would include sustainment engineering services. This methodology is being employed by a number of western nations in order to reduce the strain on their CSS personnel. Additionally, this allows for a more concentrated and sustainable deployment of CSS personnel in new missions or into dangerous theatres. While this is a useful solution, it admittedly does not reduce the shortfalls of sustainment engineers enough in itself to fully resolve the basic structural

⁴⁴ Taken from an EMail note provided by Maj J Thelwell, J3 Engineer Requirements 6.

shortfalls.⁴⁵ Rather, this should be perceived as a partial or complementary solution which when considered in combination with an increased 640 series trade base, would provide useful synergy in improving the current situation.

Reserves Join for Excitement – Not to do Their “Day Jobs”

While it is apparent some artisan trained soldiers who join the Territorial Army within the United Kingdom do hide their skills in order to join more adventurous trades⁴⁶ this is by no means the norm. This concern, however, is echoed within Reserves 2000 papers⁴⁷ “...a number of problems with the logic of the CLS's plan to cut the Combat Arms Militia in half and use the resources saved to create new CSS units...[problems such as] Civilians whose job skills would be valuable to CSS Militia or Reserve units have shown no great inclination to practice them as part-time soldiers. If they did, the Militia Service Battalions in Windsor, London and Toronto, all of which are in communities with large numbers of civilian vehicle mechanics, would be swamped with potential recruits. This is simply not the case. By the same token, medical units in cities containing universities with medical faculties should be overwhelmed with doctors clamouring to get into uniform. This is not the case either.”

While this argument bears consideration it is by no means definitive. On the contrary, LCol Laughton, the current Commanding Officer of 2 Field Engineer Regiment in Toronto writes: “The number one thing I hear from recruiting candidates, after “how much do I make”, is that they want to do something practical and develop experience. As many are in, or will have completed some post-secondary education, trades training is extremely interesting to these young people. They all expect to do civilian engineer-related activities as part of their work here.”

This aspect has been developed and is reflected within the successful recruiting campaign

⁴⁵ Taken from an EMail note provided by Maj J Thelwell, J3 Engineer Requirements 6.

⁴⁶ Representative of 29 Engr Bde (in Aldershot), Territorial Army.

adopted by 14 AES. Their recruiting pamphlet reads: “What are the Benefits of Joining? Basic recruit training, military technical training and follow-on employment in your approved trade are **fully subsidized**. Members are also **paid a salary** during training and employment”. It would appear that while some personnel wish to distance themselves from their civilian careers many others do not, and further, many would see this as an opportunity to enhance both careers at the same time.

Probably the key to unlocking this dichotomy is to choose a location where the employment situation is such that a considerable number of personnel would find themselves within the later category described above. One such type of location is explained by CWO P La Croix DMil C 5/CME 2 (640 Series Career Manager): “...if there is a need for 640 Series Reservists within CLS. [and] my guess is yes, especially if the reservists are former Regular Force 640 Series personnel who wish to be operationally tasked, but at their choice. Quite a few... get out because they...are no longer interested in being posted...how many ...would join ... from such places as Chilliwack, Edmonton, Petawawa, Valcartier and Gagetown?” This is supported even further as Capt Silliker (OC 143 Airfield Engineering Flight) wrote in a recent Maple Leaf article:⁴⁸ “Our way of doing business represents a win-win situation for the squadron and the communities we work in...People in these communities are dedicated and need the work, so there is never a shortage of volunteers...We’re a great employer of local people. A lot of fellows come to us in their 30s or 40s looking to earn some money and to learn a trade...We are also beginning to have some members receive training through private companies where practical...This benefits us and it benefits local industry.”

⁴⁷ Reserves 2000 *Canada's Army of the Future*.

⁴⁸ The Maple Leaf, Article: *14 Airfield Engineering Squadron* (Jan 01).

Comments supplied by the current CO of 14 AES, Major Marques, support the desire of Reserve personnel wishing to do their “day job” under more exciting conditions: “The deployment capability is not an issue as most of our R640 are willing to deploy on missions of up to 6 months (we have at least 15% of our personnel deployed at any one time)...I have found that the R640 Reservists are normally more keen to deploy initially than the Regular Force because it will mean “employment” for him/her in the next few months.”

Issues of Recruiting and Retention

While common to nearly all Reserve Force units across the country recruiting and retention issues are of key concern during a re-role or start up phase of a unit. The following caption clearly lays out the pitfalls and the procedures to ensure success in this matter: “..A fact of life is that there will be the inevitable need to carry on with recruiting to the full potential of the community. Upon re-rolling, an opportunity exists to breathe new interest into the unit and this opportunity must not be lost...To entice young Canadians into joining the reserve, one must have something to offer that is not available at the workplace, such as driving a tank, blowing up a bridge or shooting a rifle...The concept of downloading the less glamorous tasks to the Reserves will not be dwelt on, as any suggested outcome would only be speculation. The important fact to note is, that when choosing what mission you will give the new unit, one must be cognizant of the fact that the unit must be able to attract new members....It is in the area of administering the training that the trainers must think “outside the box” and provide new means to deliver the training...The manner in which equipment is procured when re-rolling is as varied as the imagination...The overriding, or master, principle is that the members of the unit must accept the restructuring process or the soldiers will leave and there will nothing left to re-role. Regimental Honouraries must be utilized to the fullest extent possible and realized for the power

most of them hold. Harnessing the power of the Honouraries to accept re-rolling will be instrumental in the successful outcome of the initiative... Restructuring Reserve units can be successful and rewarding. The basic tenets of consultation, recruiting, training and equipping will give a high probability of success in the future of restructuring or Reserve units.”⁴⁹

Why the Army and Not the CF

The current Director of Military Engineers has stressed the importance of the sustainment engineering trades as a strategic resource, and the fact that the Army, Navy and Air Force must come together to discuss and advise on military occupational issues. “The bottom line is that tradespersons must be ready to deploy into an austere environment and provide support to CF operations.” Further subdivision of the trades to reflect unique Environmental Chiefs of Staff desires would prove to be problematic.”⁵⁰ There is a need for central management of the occupations to avoid duplication of work. In this light there could easily be an argument that rather than start a construction engineer capability within the Militia it would be easier and better to increase that which currently exists within the Air Reserve. This argument does not only occur within the Reserve world but is reflected within the regular force as well. Therein lies this simplest answer to the contention – if it makes sense to maintain Army and Air Force Regular Force 640 series engineers then it makes sense to maintain them within the Air Reserve and the Militia structure as well. Further discussion of this issue is beyond the scope of this paper.

Training Issues

Collective training and the maintenance of skills is a challenge as indicated by this report provided by the DCO of 1 CER, Edmonton “Construction Troop is an expensive entity to

⁴⁹ Hampson J. Maj *Restructuring Reserve Units – The Future of the Army?*

⁵⁰ Minutes of the MOC 640 Working Group (WG) Held at 1 CAD HQ Room 24-25 Oct 2000.

train...[while] projects for non-profit organizations such as Habitat for Humanity and Compassion House, are excellent training opportunities they only scratch the surface of Construction Troop's training requirements. Projects for non-profit organizations, although a relatively cheap source of training, also come with a cost in fuel, transportation, tool breakage and consumable usage. Annual Training and O&M funds are required to meet it's responsibility to provide challenging and meaningful training to its troops and to ensure the troop is providing a confident and capable vertical construction capability when required." This report is based on regular force soldiers within a garrison environment.

According to Major Marques, the current CO of 14 AES: "the training aspect is important as it takes an outrageous amount of time to get our R640s through the training system...The training system is already overwhelmed with a very long backlog at CFSME...The key is to partner with local training institutions very much like 14 AES is doing. We partner with local community colleges and institutions and train our personnel to QL3 (under the auspices of CFSME)...We will have to partner with communities for the members to get their OJT since we are normally located far away from Bases/Wings." "The 14 AES model is working very well with a HQ and three flights. It works with a very small budget and is very efficient. We do our own recruiting, oversee our own training and have our personnel deployed with all three elements and they have performed very well...With some modification and additional funds we are capable of providing engineering support to any unit anywhere in the world..."

While training of complex skill sets required by 640 series tradesman is difficult, it would appear no less so an issue within the Regular Force than in the Reserves. To the contrary it may even be more achievable in the Militia if conducted within the right community framework.

The Current Environment

Years of problematic development have soured the relationship between the Regular Force and Reserve Force to the point where the build up of trust is seen as both a major hurdle and an major step in the development of LFRR⁵¹. This will require time and leadership and a demonstration of overall intent to repair the damage wrought over time. The successful development of R640 series trades within the Reserves can only be seen as apposite step in this process. The key is success both in terms of the willingness of the Reserve participation and in the successful implementation.

The *Fraser Report*⁵² proposed roles for the Reserves in general terms, including some introduction of non-traditional roles: “It has to be explained in common-sense terms why these changes are necessary under present and foreseeable conditions. Assurances that most combat units will be retained even if some changes may be needed to ensure they are of viable size (e.g., "tactical groupings" of some units while retaining their traditional insignia).” In the case of 31 CER (The Elgins) the change was made from Armoured to Engineer while still maintaining important aspects of unit heraldry.

Even with careful planning, however, changes can surprise planners and flexibility must therefore remain a tenet of planning. This combined with good communications with organizations which control key decisions can help avoid surprises. As an example, NDHQ message CANFORGEN 046/95 (Annuitant Instruction) was introduced at the mid-way point in the AE Reserve Program.⁵³ The instruction outlined restrictions to Reserve employment of former members of the regular force who are in receipt of an annuity. The limitation's impact upon the AE Reserve Program has been and will be a significant impediment to deployed

⁵¹ CLS response to a question during a recent presentation to CFCSC CSC 28.

⁵² *In Service of the Nation: Canada's Citizen soldiers in the 21st Century - The Fraser Report.*

operations. The main reason for the establishment of AE Reserve units was to provide the Commander a trained, deployable Reserve resource. The annuitant instruction limits the number of Reserve personnel that can deploy given that most operational deployments exceed the instruction time limit.

Summary

It is notable that the *Air Reserve Review Report* compared the 14 AES concept against an increase in the Regular Force, using “normal Air Reserve practices (vice partnering), the use of contractors and against some of the foreign methodologies. It was found that the Air Reserve based partnering model was the most appropriate.⁵⁴

There are a number of alternate solutions, potential challenges and perhaps the potential for some resistance to introducing R640 series trades into the Militia. While none of these can be discounted outright, neither are any of them compelling. If anything, they imply the need for careful study, good communications at all levels and a broad understanding of the environment in which we are operating.

⁵³ 1st Canadian Air Division 788—1 (A4 AE Ops 4) 9 Nov 99 *Air Reserve Review Report*.

⁵⁴ 1st Canadian Air Division 788—1 (A4 AE Ops 4) 9 Nov 99 *Air Reserve Review Report*.

Chapter 8

Conclusion

This paper further defined for the reader an understanding of the 640 series trades, the problems they currently face and the potential negative effects on CF operations. Also it explained the advantageous strategic framework for change which currently exists. Additionally, this paper developed a possible solution on how to improve the overall situation for the construction engineer trades. A number of alternate solutions to, and challenges associated with the solution, were presented.

The 640 series engineers are found throughout the CF and any solution which would improve any part of their structure (i.e. the Army's capability) will assist in improving the overall situation. If the CF force structure was to increase the number of the personnel within the construction engineer trades the overall health of the sustainment engineer organizations would be much better. The CF's ability to sustain deployed operations would clearly benefit from more 640 series tradesmen. What is required is more 640 series occupational series tradesmen, while the Reserves need both achievable and essential roles.

Since at least 1992 there has been considerable political interest in creating a more effective and efficient Reserve Force. Within Governmental policy documents and within the Department we see a clear linkage and an understanding of the changing, and perhaps growing relevance of the Reserve Force - in particular in its ability to generate combat support (CS) and combat service support (CSS) capabilities. The validity of this is even further supported both in analysis of current and foreseeable Army structural requirements and as well in an analysis of current demographics. While there has been some progress it is admittedly a slow, emotional and consultative process which requires careful thought and implementation. The mechanisms

for change are in place however, and there is a clear direction and mandate to proceed with changes which will improve the lot of the Reserve Force and the CF.

The feasibility of creating and training R640 series construction engineer tradesmen within the Militia is largely without doubt. A number of other modern western nations all different, yet each similar its own right, have arrived at the independent but common conclusion that it makes sense to do so within their organizations. The Militia is currently expanding other roles to include CIMIC, psychological operations as well as NBC Defence units. Combined with this, is a highly successful Air Force example of what is intended to be achieved within the Militia.

There are a host of ongoing and potential methodologies which can increase the likelihood of success of Reserve programs. They vary by region and perhaps the level within the chain of command in which they would require approval for implementation, but clearly demonstrate the degree of flexibility that is possible under current conditions. A number of these enablers are being implemented right now, and not only might these be useful for our purposes but they demonstrate the current corporate determination to change the system.

Rather than provide specific recommendations as to the best method by which R640 series tradesmen can be introduced into the Militia, 10 fundamental principles were provided which can help lead towards a successful planning campaign. It is for the detailed work of an implementation team to determine exact locations and methodologies to be employed.

There are a number of alternate solutions, potential challenges and perhaps the potential for some resistance to introducing R640 series trades into the Militia. While none of these can be discounted outright, neither are any of them compelling. If anything, they imply the need for

Careful study, good communications at all levels and a broad understanding of the planning environment.

This paper has answered “why” one might consider developing R640 series construction trades within the Militia. As well, it was demonstrated that the strategic framework is in place and the time to act on this initiative is now. The question of exactly “how” and “where” creating a R640 series capability might best be done was deferred in favour of a presentation of general planning principles. If nothing else however, this paper has clearly demonstrated that *a viable Army Reserve Force capability, which supports the mandate of LFRR and which will improve the capability of both the Army and the CF to sustain operations, would be the creation of R640 construction engineer trades within the Militia.*

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Annex A

Construction Engineer Trades - Survey

TOPIC: Development of R640 Series Construction Engineer Trades within the Army Reserve

THESIS STATEMENT: A viable Reserve Force capability, which falls within the mandate of Land Force Reserve Restructure (LFRR), would be the creation of R640 Engineer Trades within the Army Reserve.

1. **Please provide any general comments (pro or con) on the Thesis Statement.**

(feasibility of the thesis proposal against existing LFRR planning, compare and contrast to existing initiatives such as ongoing CIMIC, Psychological Operations and NBC Defence units capability development within the Reserve Force, analyse thesis proposal against Army Transformation efforts and/or other Army/CF planning initiatives)

2. **Highlight any key Reg F vs. Res F aspects.**

(possible complementary/supplementary capability mix, cost/readiness evaluation, mobilization and sustainment issues, training issues, career issues)

3. **Describe potential structuring models.**

(review of Air Force Reserve Airfield Engineering Flights, develop and assess possible land structuring options such as complete units, sub-units, individuals, 10/90, composite units etc., review regional aspects)

4. **Describe potentially unique and/or perhaps more flexible methods of creating and maintaining the intended capability within the Res F.**

(partnering with civilian agencies, TOS modifications, various approaches to steady-state training, stand up or enhancement of units, recruiting aspects, demographics)

5. **As well as any comments you might supply, please direct me to relevant papers or attach them to your reply if you can.**

Annex B

Characteristics, Roles and Functions of the Regular and

Reserve Components of the Army⁵⁵

<u>MISSION</u> To generate multi-purpose, combat capable land forces	
<u>VISION</u> One combat capable Army of proud, professional, disciplined and highly motivated soldiers, encompassing Regular and Reserve Components, supported by dedicated civilian employees, serving Canada and defending Canadian interests.	
<u>REGULAR COMPONENT</u>	<u>RESERVE COMPONENT</u>
<u>Defining Characteristics</u>	<u>Defining Characteristics</u>
<ul style="list-style-type: none">• <u>Terms of Service.</u> Regulars consent to serve without restriction and are thus liable to employment and deployment as the Government requires;• <u>Availability.</u> Regulars are full-time soldiers, who serve on a 24/7 basis and are able to devote a full career to the development of their military potential;• <u>Predictability.</u> The Regular Component provides a guaranteed capability which can form the basis of military plans and commitments;• <u>Stability.</u> The Regular Component is a mobile work force, which can and does re-locate and deploy as required to meet changing military needs; and• <u>History.</u> The Regular Component reflects the need for a force-in-being as an essential pillar of national defence.	<ul style="list-style-type: none">• <u>Terms of Service.</u> Reservists consent to serve as volunteers. Consent must also be sought for all changes in their terms of service, whether for training, employment or operations, except through an order-in-council to meet a national emergency;• <u>Availability.</u> Reservists are primarily part-time soldiers, whose military employment potential may be constrained by their civilian activities or commitments;• <u>Predictability.</u> Reserve service is uncertain as regards availability, scope and duration;• <u>Stability.</u> The Reserve Component is a fixed presence in the community, which gives the Army a local identity and permits military service without loss of personal stability; and• <u>History.</u> The Reserve Component perpetuates the Canadian tradition of the citizen soldier as an essential pillar of national defence.

⁵⁵ Annex A To LFSDG Part I – Chapter 4.

Role

The Regular Component provides Canada with a ready response capability. This role includes the following functions:

- Standing Forces. Provide forces possessing the quality, quantity and functional capabilities needed for the full range of assigned tasks;
- Force Generation. Provide the capability to constitute and prepare task-tailored forces for a broad range of missions;
- Force Employment. Provide the ability to deploy and employ forces up to and including the Task Force and Joint Task Force level;
- Sustainment. Be capable of sustaining committed forces as determined by the operation;
- Rapid Reaction. Provide high-readiness forces for domestic and international tasks;
- Command and Control. Provide a robust and flexible command and control capability for both the tactical and operational levels of command;
- Professional Knowledge and Skills. Develop and maintain professional knowledge and expertise to include the doctrine on which organizations and operations are based;
- Advice to the Government. Provide standing expertise in land operations to ensure that the advice required by government for either single service or joint operations is available;
- Training. Develop and enforce training policies and standards applicable to the full spectrum of operations;
- Support and Communications Infrastructure;
- Assistance to Reserve Component Training; and
- Assistance to Rangers, Junior Rangers and Cadets.

Role

The Reserve Component contributes to the depth, breadth and flexibility of Canada's defence capability and provides the military link to the community through its presence across Canada. This role includes the following functions:

- Military Capabilities for Mobilization Beyond Those Resident in the Regular Component. The Reserve Component recruits, trains, and administers part-time soldiers, thus enabling local access to military service. The Reserve Component:
 - Provides an organizational framework for use in stages 3 and 4 of mobilization;
 - For operations, provides augmentation and sustainment in the four stages of mobilization: force generation, force enhancement, force expansion and national mobilization;
 - Provides skilled personnel to supplement the Regular Component on a day-to-day basis;
 - Provides capabilities which are complementary to those maintained in the Regular Component;
 - Provides locally available military resources for civil emergencies and civil assistance tasks; and
 - Contributes, through throughput, to the creation of a large pool of Canadians possessing military skill and experience; and
- Nation Building. By virtue of its nationwide deployment and professional orientation, the Reserve Component also:
 - Promotes national unity;
 - Builds public support for the CF through community presence and visibility;
 - Creates part-time employment for thousands of Canadians and economic benefits for communities across Canada;
 - Through military training in a national institution, reinforces good citizenship and develops qualities of leadership, self-discipline and teamwork in all its members; and
 - Provides support to the Cadet Program.

