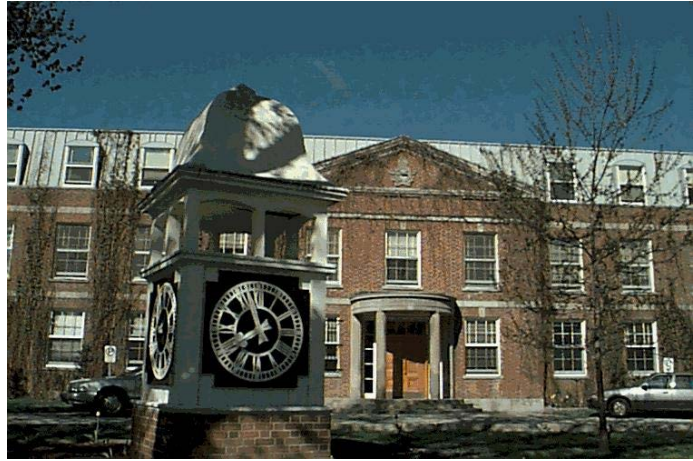


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OUT OF THE COMFORT ZONE: FORCE ON FORCE TRAINING IN THE CANADIAN ARMY

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JCSP 45

Service Paper

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Out of the Comfort Zone: Force on Force Training in the Canadian Army

By/Par le Major Chris R. Hillier

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“No war is over until the enemy says it's over. We may think it over, we may declare it over, but in fact, the enemy gets a vote.”

- General (US) James ‘Mad Dog’ Mattis

AIM

1. Canada’s need to field an agile, well-educated, flexible, diverse, and combat-ready military at home and abroad is repeatedly emphasized within “Strong, Secure, and Engaged: Canada’s Defence Policy” (SSE).¹ Potential expeditionary operations across the spectrum of conflict, from peacekeeping to combat, will be conducted in increasingly complex and unpredictable environments. As such, individual training (IT) and collective training (CT) must be equally dynamic in support of building a capable and ‘mission ready’ force. This paper will present training opportunities where ‘force on force’ could be implemented as a training requirement in the CA, to include: (1) Live Training; (2) Simulation Training; and (3) Sand Table Exercises. For the purpose of this paper, ‘force on force’ is defined as an opposition force (OPFOR) who is neither constrained, nor limited, and is fighting to win against the primary training audience (PTA).

INTRODUCTION

2. Prussian military historian Carl von Clausewitz describes war as “not the action of a living force upon a lifeless mass...but always the collision of two living forces...so long as I have not overthrown my opponent, I am bound to fear he will overthrow me.”² Historian Alan Beyerchen supports Clausewitz’s philosophy, in that conflict is non-linear, and at all levels of war there is dynamic interaction that is not just a mere sequence of actions by each opponent, but a pattern of mutually hostile intentions and simultaneously consequential actions.³ Inevitably this clash of wills results in successes and failures, both of which are essential in creating thinking leaders, capable of critical reflection. The old adage “there is no better instructor than the enemy” is generally accepted, but the majority of training exercises in the Canadian Army (CA), and her allies, are designed using templates to control injects and tempo for the PTA.⁴ While this succeeds in targeting specific Battle Task Standards (BTS) or meeting training gateways, this ‘scripted’ approach to training does not leverage the valuable lessons learned that comes from two thinking opponents locked in combat.

¹ Government of Canada, Department of National Defence, “Strong, Secure, and Engaged: Canada’s Defence Policy”, Copyright Her Majesty the Queen in Right of Canada, 2017, p 57.

² Clausewitz, von, Carl, “On War”, ed. and trans. Michael Howard and Peter Paret (New York: Alfred A. Knopf, 1993), p 117.

³ Beyerchen, Alan, “Clausewitz, Nonlinearity, and the Unpredictability of War”, *International Security*, 17, no. 3 (Winter 1992-1993): p 67.

⁴ United States 3 year Decision, Action, Training, Environment (DATE) model – *used in Computer Assisted Exercises such as the CAF’s Ex UNIFIED RESOLVE (a Level 7 exercise within a level 8 environment) and United States’ led Large Scale Exercises (LSE).*

DISCUSSION

3. The ‘After Action Report’ (AAR) process is the CA training tool used to facilitate “learning while doing” and it is incorporated throughout the different phases of training events.⁵ The formalized AAR process is governed by the Canadian Manoeuvre Training Centre (CMTC) in order to maximize IT and CT value at the tactical and operational levels. However, if the conduct of an exercise follows a scripted template, such as a main events list or an OPFOR whose freedom of manoeuvre is constrained, true strengths and weaknesses are camouflaged, preventing the feedback and insight critical to improved performance. Albeit with good intentions, the exercise controller effectively limits the tempo or pace of training so that the PTA can focus on the BTS at hand, without becoming overwhelmed.

4. The CA training environment, like the United States (US) Army, enables training without reprisal and the opportunity to learn from their mistakes.⁶ By testing themselves against an OPFOR who is actually fighting to win, the potential of ‘training to failure’ increases. Upon the culmination of an exercise, if the PTA is the clear loser it should not equate to a flaw in the exercise design. On the contrary, it is the benefit of being removed from the proverbial ‘comfort zone’. It is a unique opportunity for officers, non-commissioned officers (NCOs) and non-commissioned members (NCMs) to take a hard look at the decisions they make and the tactics they employ. By provoking this sober self-reflection, the CA is training and encouraging its leaders to be mentally resilient, think critically, and act independently. The benefits of this training philosophy must be clear and explicitly understood at all levels. For ‘force on force’ training to be successful, it must be incorporated into the Managed Readiness Plan (MRP) and the CA Operations plan (Op plan), resourced, and protected.⁷

Live Training Opportunities

5. CMTC is responsible for the annual level 7 (brigade) dry training exercise named Exercise Maple Resolve (Ex MR) which is the certification exercise for the RTHR brigade. With regards to scheduling, the current length of Ex MR prevents live ‘force on force’ training to just be added to the calendar. Instead, level 7 BTS for certification could be targeted during live ‘force on force’ training against an unconstrained and thinking enemy. CMTC’s mandate supports this potential training delivery:

Facilitate the design and execution of immersive collective training opportunities for the Canadian Armed Forces (CAF) in order to provide a realistic and challenging full spectrum, contemporary operating environment which enables learning and confirmation for designated high readiness forces.⁸

⁵ Government of Canada, Canadian Manoeuvre Training Centre website. - *The AAR phases are (1) Planning Phase; (2) Preparation Phase; (3) Conduct Phase; and (4) Follow-up Phase.*

⁶ Kilner, Pete, Maj, and Burgess, Tony, Maj, Company Command: Building Combat-Ready Teams, United States Army, April 2005, p 22.

⁷ Michael Roi. “Canadian Defence Priorities, CF Force Posture and Strategic Readiness.” Defence R&D CORA Technical Memorandum, 2012. pp 1-10. - *The CA’s combat brigades have been cycled within a three year managed readiness plan (MRP) since 2013, which includes reconstitution, road to high readiness (RTHR) and high readiness (HR).*

⁸ Government of Canada, CMTC website, p 2.

6. To support this task, the CMTC's OPFOR model is worth analyzing. Currently the CAF is deployed in Latvia (Op Reassurance) and Ukraine (Op Unifier) in support of North Atlantic Treaty Organization's response to Russian Federation's aggression. A CA permanent OPFOR cadre could incorporate the Russian Federation's current non-linear warfare tactics to provide the PTA with distinct tactics, training and techniques (TTPs).⁹ The Ex MR OPFOR order of battle (ORBAT) over the past three years (2016-18) has instead changed based on coalition participation, operational tempo, and Ex MR design. The Ex MR 16 OPFOR was a Battle Group (BG) formed around a unit from the reconstitution brigade with attachments; TTPs were "not Canadian" but were also not reflective of any specific "near-peer" adversary. The Ex MR 17 OPFOR was a rotating task from within the road to RTHR brigade, with three BGs cycling in to Blue, Red and exercise support roles over different periods; TTPs were Canadian as both Blue and Red BGs were certified during the conduct of the exercise. Finally, Ex MR 18 OPFOR was a US National Guard Cavalry Squadron; TTPs were those of the US Army.

7. While there are benefits to a flexible OPFOR model, there is room for improvement. The Australian Army, roughly the same size with similar capabilities as the CA, also does not have a dedicated OPFOR for their multi-national exercises (Ex Talisman Sabre and Ex Hamel), but rotates the task amongst the HR equivalent brigade, provided they are not deployed.¹⁰ The US Army fields dedicated OPFOR cadres, such as the 11th Armored Cavalry Regiment, an active duty combat unit at Fort Irwin, home of the US National Training Centre. The American regiment's OPFOR alter ego, the 60th Guards Motorized Rifle Division, is armed with an ORBAT of American vehicles visually modified to look like Russian Armoured Fighting Vehicles (AFVs).¹¹ When operating against the PTA they employ Russian Federation TTPs and fight to win.

8. Implementation of live 'force on force' training in the CA presents several challenges. As outlined in the MRP and the CA Op plan, the RTHR brigade calendar is reserved for numerous IT and CT events to meet gateways for level 5 (combat team) live fire and level 7 dry training. As such, any live 'force on force' training is in direct competition with the resources (training budgets, maintenance plans, vehicle mileage, etc.) and time that are ear-marked for achieving specific BTS. As well, the reconstitution brigade assumes a spectrum of tasks, including support to CA training institutions, disaster assistance response teams (DART), and non-combatant evacuation operations (NEO); the absence of key leadership and senior personnel affects the cohesion, strength, and ability of units to train effectively. Fielding a permanent CMTC OPFOR training cadre may also be fiscally out of reach, however, a rotating CA task based on a specific ORBAT and TTPs could provide a more relevant and challenging OPFOR during future live 'force on force' training exercises.

⁹ Armas, Jason, C., Major, "Considering Russia: Emergence of a Near Peer Competitor", Marine Corps University Press, Quantico Virginia, 2017, pp 10-11.

¹⁰ Commonwealth of Australia, Australian Army website.

¹¹ Mizokami, Kyle, "The "Russian" Combat Brigade the U.S. Army Keeps for Training, Mechanics", 29 June 2017.

Simulation Training Opportunities

9. The Canadian Army Simulation Centre (CASC), like CMTC, falls under the Canadian Army Doctrine and Training Centre (CADTC). It provides appropriate “synthetic environment capabilities in support of Land operations, training, and concept development”, supporting the CA as well as other elements and government departments.¹² The CA Simulation Strategy (CASS) guides the development of CA simulation capabilities, employing a centrally controlled with a distributed execution framework.¹³ This framework is ideal to incorporate simulation “force on force’ training via artificial intelligence (AI) or an unconstrained OPFOR on the same systems. For simulation training under level 7, Unit Commanding Officers (COs) have the flexibility to plan and budget for simulation training, leveraging different programs to achieve their training aims, while the CA is responsible for higher level exercises such as Ex Unified Resolve. As per Ex MR and other major training exercises, this training must be aligned within the CA Op plan and the MRP to source funding at CA level.

10. There are additional benefits from conducting simulated “force on force’ training. The CASC OPFOR ORBAT’s model, including AFV characteristics and capabilities, are accurately portrayed and can be leveraged by OPFOR. If the PTA fails to consider enemy factors then the AAR should capture those lessons learned. Simulated training also effectively facilitates joint and combined training with Canada’s allies as captured in US Joint Staff’s coalition capability demonstration:

French Air Force Joint Terminal Attack Controllers at the Air Ground Operations School at Nancy-Ochey Airbase, France conducted virtual close air support missions with an AC-130 call for fire trainer at U.S. Special Operations Command’s Joint Training Support Center at Hurlburt Field, Florida. Additionally, a Canadian infantry section at the Canadian Army Simulation Centre in Kingston, Ontario, conducted distributed virtual missions with U.S. and Canadian squads at Fort Bliss, Texas.¹⁴

Ex UR 18 post exercise report (PXR) also demonstrated the numerous lessons learned during the validation and certification of the RTHR brigade, including PTA Headquarter (HQ) manning shortfalls, planning product dissemination, and the integration of Higher and Lower HQ reporting.¹⁵ Exercise controllers and AI contributed to a realistic and challenging training

¹² Government of Canada, The Canadian Army’s Simulation Strategy, dated 12 November 2012, p 1. *Simulation is all which is not real-life activities that support operations, professional development, concept development and experimentation, research and development and acquisitions.*

¹³ *Ibid*, p 2.

¹⁴ Seavey, Kevin and Reitz, A. Emilie, and Klug, Jillian, Maj, “Establishing Multinational Live, Virtual and Constructive Interoperability through Mission Partner Environments”, Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) 2016, p 5.

¹⁵ Government of Canada, CMTC Post Exercise Report – Exercise Unified Resolve, 3350-1-UR18 (Fmn Trg Gp), 7 March 2018, Annex A.

environment; incorporating the ‘force on force’ methodology would arguably lead to the identification of additional areas to improve and sustain.

11. The challenges with simulation ‘force on force’ training opportunities are no different than those faced by the CASC today. The procurement of different programs and simulation systems by Canada’s allies require solutions and threatens joint and multinational interoperability. In addition, simulation training does not capture the complex human environment that the CAF operates in, including “cultural, religious, ethnic, legal, economic, social and political” considerations.¹⁶ Nor can it duplicate the effects of the climate, topography, vegetation, and meteorological effects on the PTA. Nevertheless, if well-integrated with live training, simulation exercises such as Ex UR can directly and indirectly improve operational performance.¹⁷

Sand Table Training

12. Despite being significantly less sophisticated than the two previous ‘force on force’ training opportunities, the concept of ‘sand table’ or ‘mud model’ exercises has been proven effective. Major (AUS) Ben McLennan analyzes how *Generaloblast* Hans Von Seeckt’s philosophy of ‘train better, fight best’ transformed the *Reichswehr* (German Army) during the interwar years.¹⁸ Von Seeckt reinstated the *Auftragstaktik* (Mission Command), focusing on developing the *Reichswehr* into a ‘leader’s Army’ or *Fuhrerarmee*, and created thinking soldiers capable of critical reflection and intellectual development.¹⁹ The result was superior tactical performance against Germany’s adversaries during the Second World War, especially impressive considering the constraints imposed by Versailles on the *Reichswehr*. The ‘sand table’ or ‘mud model’ exercise greatly contributed to this end.

13. Effectively a tactical level exercise, the ‘sand table’ involves all members of the PTA, and can be scaled to meet battalion or fire team level tactical scenarios. The ‘sand table’ itself is a defined area of operations (AO) with scaled models of buildings and terrain and each member of the PTA is represented. A problem-set is introduced, and each member participates in the war game, including speaking roles. This inexpensive, yet effective method “created an understanding and capacity to rapidly appreciate a situation and react decisively.”²⁰

14. With minor adjustments, any OPFOR adversary (Russian Federation, North Korea, ISIL, etc.) could be integrated into the ‘sand table’ exercise to provide a “force on force” training event. Von Seeckt’s ‘sand table’ method is similar in concept to the CA’s turn-based war-

¹⁶ *Ibid*, p 3.

¹⁷ Government of Canada, The Canadian Army’s Simulation Strategy, dated 12 November 2012, pp 2-3.

¹⁸ Commonwealth of Australia, Australian Army Journal, Volume IX, No. 3, Summer 2012, p 65.

¹⁹ *Ibid*, pp 61-62.

²⁰ *Ibid*, p 62.

gaming course of action development that occurs during the operational planning process.²¹ Referees or observer, controller, trainers (OCTs), similar to those used by CMTC during live training exercises, could also be employed to adjudicate battlefield damage and effects on forces. The ‘sand table’ exercise is the antithesis of large-scale live manoeuvres in that it requires minimal preparation and time to complete. Unit leadership at all levels have the flexibility and opportunity to train against specific OPFOR TTPs and cross-train subordinates in the responsibilities of their superiors with zero risk. With today’s technology, CASC could be leveraged to build three dimensional models of an AO, projecting a simulated ‘sand table’ on the ground or wall; the potential for creativity is unlimited. While there is potential to conduct joint “sand table” scenarios, joint level exercises would be better suited for simulated or live training exercises.

CONCLUSION

15. In order to field a CA as envisioned within SSE, the CA must follow through with “modern, world-class training that will put new recruits on a solid foundation to succeed.”²² Current training methodologies and OPFOR models succeed in certifying the CA RTHR brigades but there is a resistance to taking our officers, NCOs, and NCMs out of their ‘comfort zone’ and a fear of training to failure. The implementation of a ‘force on force’ training philosophy would greatly contribute to the development of an agile, well-educated, flexible, diverse, and combat-ready military needed for the current and future operating environment.

RECOMMENDATION

16. To ensure a deliberate approach is taken regarding the ‘force on force’ methodology, it must be incorporated into the MRP and the CA Op plan, and resourced accordingly. Transforming the CA into a ‘force on force’ training institution is not an insurmountable task, the supporting infrastructure, including CMTC, CASC, and other equally capable organizations exist to support this type of training. They would share the same challenges as the CA, as they too, would be taken out of their ‘comfort zone’.

²¹ Government of Canada, Canadian Forces Joint Publication 5.0, The Canadian Forces Operational Planning Process, April 2008.

²² Department of National Defence, “Strong, Secure, and Engaged: Canada’s Defence Policy”, Copyright Her Majesty the Queen in Right of Canada, 2017, p 21.

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