



HAS COUNTER-IED BEEN FORGOTTEN?

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Service Paper

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By Major Mathew Berry

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AIM

1. The aim of this service paper is to address the loss of interest and education about Improvised Explosive Devices (IEDs) within the Canadian Army (CA) and more specifically the lack of interest towards maintaining an integrated Counter IED (C-IED) capability outside the Engineer Corp. It will highlight how maintaining an Explosive Ordnance Disposal (EOD) capability within the engineers is not in itself, C-IED. C-IED is a multidisciplinary joint approach that needs to be integrated and understood at all levels in order to be effective. This paper will address areas of concern based upon the C-IED lines of operation at the tactical level; however, further analysis would have to be completed in order to determine if the operational and strategic levels suffer from the same effects.

INTRODUCTION

- 2. According to the North Atlantic Treaty Organization (NATO) C-IED Centre of Excellence, 14,700 IED events were reported globally between 1 August 2018 and 31 Jul 2019, which resulted in over 23,400 casualties. The hotspots may seem obvious but include Afghanistan, Iraq and Syria; keeping in mind that Canadian soldiers are currently operating in these regions. The problem that is being addressed in this paper is centered on C-IED practices, training, equipment and interest or more specifically the lack thereof. Therefore it is important to highlight here, what C-IED is. As stated in doctrine, it "is defined as the collective efforts at all levels to defeat the IED system by attacking the networks, defeating the device and preparing the force to reduce or eliminate the effects of all forms of IEDs." The IED system being the resources, personnel and activities involved from planning through the execution of carrying out an attack. This definition is vital as it highlights the importance of integration across that CA and Canadian Armed Forces (CAF) in order to truly counter IEDs. In fact, the C-IED issue is a whole-of government problem and the CA is just one cog in the wheel.
- 3. As eluded to above, C-IED is a comprehensive approach and is based upon three lines of operation; prepare the force, attack the network and defeat the device.³ This paper will utilize the three lines of operation to frame the problem at the tactical level before making a recommendation on how the CA can close the gap and ensure IED knowledge and SOPs are not further dismissed.

¹ COL Stephen Kavanaugh, Tactical Defense Media, "Engaging the Global C-IED Fight," last accessed 01 February 2021, https://tacticaldefensemedia.com/engaging-the-global-c-ied-fight/.

² Canada, Department of National Defence, *B-GL-365-021/FP-001 - Counter-Improvised Explosive Devices (C-IED) For Land Operations* (Kingston, ON: Director of Army Doctrine – Canadian Army Doctrine and Training Centre, 2012), 3-1.

³ Canada, *B-GL-365-021/FP-001*, 4-1 to 4-2.

DISCUSSION

Prepare the Force

4. Prepare the force is meant to ensure that CAF personnel are ready to operate in an IED environment. This includes basic IED and mine knowledge, reaction drills, search techniques, and the use of equipment.⁴ At the tactical level, the CA is losing interest in "preparing the force", with respect to developing IED knowledge and building standard operating procedures (SOPs). Some of this may be in part to how C-IED doctrine defines "prepare the force", which states: "prepare the force encompasses efforts, equipment and measures that prepare the friendly forces to conduct operations in a high threat IED environment." The key phrase being high threat environment. The CAF operates in varying regions across the globe, all of which have been known to employ IEDs, but, they are not consider high threat. However, the more knowledge the CA looses, the longer it will take to regain it. In a study completed by DRDC, it was confirmed that those with experiences operating in an IED threat environment (such as the combat mission in Afghanistan) were much more acute to recognize and respond to cues than those with only classroom style training. However, IED education is no longer prioritized as will be discussed below and the CAF is losing residual knowledge.

a. Individual Training

(1) Excluding Combat Engineers, CAF soldiers receive all arms C-IED training during developmental periods (DP) one and two only, whereas the construction and maintenance of IED knowledge and SOPs beyond DP one and two is left to brigades. However, because organizations have the flexibility to adjust their Individual Battle Task Standards (IBTS), it means that not all soldiers and organizations undergo the same, if any, IED training. The Explosive Threat Hazard Awareness and Recognition (ETHAR) program has been built to enable training however, for the most part, CAF soldiers will only complete ETHAR training if directed to do so by CJOC for an upcoming deployment. Level one ETHAR, which is what most deploying soldiers require, is often completed in two stages. The first, an online theory portion and the second, a practical application portion which includes identification of

⁴ Canada, *B-GL-365-021/FP-001*, chapter 11; chapter 11 is dedicated to "Prepare the Force" activities which have only lightly been addressed in this section.

⁵ Canada, *B-GL-365-021/FP-001*, 3-2.

⁶ Canada, Vladimir Zotov, Jerzy Jarmasz, Matthew Lamb and Dorothy Wojtarowicz, *Improving Perceptual Judgement for Recognizing Improvised Explosive Threats – Assessment of the Effectiveness of the Environment Familiarization and Indicator Trainer* (Toronto, ON: Defence Research and Development Canada, 2014), 1-2.

⁷ Canada, *B-GL-365-021/FP-001*, 11-1-1.

⁸ The course is available via Defence Learning Network and is titled *RCAF IBTS Explosive Threat* and Hazard Recognition IS1 Part 1; additionally this online package has been built by the RCAF, as no CA online package is available.

threats and the execution of drills. ⁹ The entirety of ETHAR level one can be thought by all arms soldiers ¹⁰; however, it is often preferred that soldiers utilize the package available online for the theory and engineers for the practical application. Most often, this is because the residual knowledge has not been maintained outside of the engineers to enable this education and training.

(2) What above highlights, is that outside of deploying soldiers, there is no standard and arguably little residual IED knowledge maintained at the tactical level. A solution could be that ETHAR level one is a requirement for all CA soldiers to complete as part of their annual IBTS. Another option is to explore alternatives such as the Environment Familiarization and Indicator Trainer (EFIT). EFIT is a tool developed by DRDC and "provides cultural familiarization of the operational terrain by exposing troops to real video of convoy operations." DRDC's study confirmed that troops who utilized this trainer were better prepared to recognize low-high risk IED threats; however, the program does not allow for IED finds or drills due to its unclassified nature.

b. Collective Training

(1) Exercise MAPLE RESOLVE, the CA's premier collective training exercise, is designed for brigades to run through a cycle of full spectrum operations based upon the Decisive Action Training Environment (DATE), which can accommodate IED injects as required. The exercise itself is designed by the Canadian Manoeuvre Training Centre (CMTC) but, it is built from guidance provided by Canadian Army Doctrine and Training Centre (CADTC) and the incoming Division. These organizations provide their planning guidance and priority BTS, and CMTC refines the details of the exercise from the guidance. ¹² In other words, if C-IED is not a priority to either organization; it does not get built into the exercise. IEDs may still occur, but generally there is a specific purpose why IED events are executed and are at the discretion of the Exercise Director. 13 Many soldiers and exercise planners have argued that IED play and the incorporation of Engr assets slow the momentum of the training environment, but "preparing the force" means that these capabilities must be integrated in order for soldiers, commanders and staff to understand how to integrate them and develop SOPs. The trend away from IED play at Ex MR is demonstrated by the fact that in recent years,

⁹ Canada, Department of National Defence, *A-P3-002-EHA/PH-H01 - Explosive Threat and Hazard Awareness and Recognition – Training Standard* (Gagetown, NB: Land Force Doctrine and Training System, 2012), 2-4/5.

¹⁰ Canada, A-P3-002-EHA/PH-H01, 1-3/3.

¹¹ Canada, Improving Perceptual Judgement..., ii.

¹² Personal correspondence with CMTC COS and CMTC G5.

¹³ I was the Engr OCT for Ex MR 19 and supported the inject design prior to and during Ex MR 19.

including the upcoming Ex MR 21, brigades undergoing validation have conscientiously decided to leave their EOD equipment and specialists at home stations, and not involve them in Ex MR.¹⁴

b. Maintenance of Equipment/Resources

- (1) The engineers are not immune to the effects of the CA not currently operating in an IED saturated environment. The equipment such as the expedient route opening capability (EROC) suite is not being maintained (for reasons other than equipment fatigue) outside of 4 Engineer Support Regiment (ESR) in favour of other capabilities. It is important to note that 4 ESR does not belong to an affiliated combat brigade but instead to the support brigade. This is relevant because the risk is that combat brigades are becoming increasingly unfamiliar with EROC, both in terms of capability and constraints. However, engineers in the combat engineer regiments are starting to lose the capacity to provide advice on this capability as well, as EROC operators are becoming sparse themselves. Additionally, the CAFs EOD teams no longer have a vital piece of equipment that would allow them to be operationally effective; portable electronic counter measures (ECM).
- (2) Equipment such as the EROC suite and ECM are vital tools for supporting defeat the device operations. However, the CAF needs to first prepare the force by ensuring these capabilities are maintained and integrated into the training regime.

Attack the Network

5. "The intent of "attacking the network" is to disrupt the IED system" and is associated with the activities predict, prevent and exploit. However, truly attacking the network requires both operational and strategic resources to execute in theatre, which JCET has been designed to facilitate. At home, most CAF training excises do not have the background scenario and analysis developed enough to allow the tactical units to complete the *predict* and *exploit* activities of attacking the network; however, it is possible as demonstrated by Exercise ARDENT DEFENDER (Ex AD). Ex AD highlights how to integrate complex background/intelligence scenarios with real time analysis

 $^{^{14}}$ As the 2 CER C-IED Sqn OC, I did not deploy any EOD capabilities to Ex MR 17 based upon the limited IED play involved; personal correspondence with CMTC COS confirmed minimal EOD capability for EX MR 21 as well.

¹⁵ As the 2 CER C-IED OC from 2016 to 2018, the units EROC suite was put into long term preservation. The other CERs made similar choices with some equipment even sent to 4ESR to augment their capability.

¹⁶ 2 CER had at one point, only 1x EROC operator who was on MATA. The only other members able to move the equipment were the maintainers.

¹⁷ Ex ARDENT DEFENDER Brief, dated 19 Nov 20, slide 9.

¹⁸ Canada, *B-GL-365-021/FP-001*, 4-1.

¹⁹ Canada, *B-GL-365-021/FP-001*, 4-1.

conducted via exploitation of the devices.²⁰ But, this exercise's audience is EOD operators and JCET staff, and is a stand-alone exercise that is neither conducted with or on the fringes of other manoeuver exercises.²¹ Therefore, the exercise stops short of "attacking the network" as *prevent* activities are not performed.

- 6. The exploitation and analysis of IEDs is critical and helps develop "actionable intelligence that when fused with operational planning can lead to kinetic or non-kinetic operations against targets that gets after [the] [a]ttacking the [n]etwork pillar which is the main effort of the C-IED approach in NATO."²² The result of having no CA exercise that facilitates an integrated approach to "attacking the network" (which allows for intelligence gained from exploitation and analysis, to inform the operational planning process (OPP)), is that soldiers, commanders and staff have forgotten the importance of this C-IED line of operation. Case in point, the CA no longer runs the Tactical Exploiter (TE) course hosted by the Combat Training Centre (CTC) in Gagetown. CTC has additionally stood down its C-IED cell due to the lack of interest and use by the CA.²³
- 7. Ex AD highlights the importance of exploiting a device and the scene in order to collect evidence that feeds analysis. That analysis then allows soldiers to attack the network, facilitates in theatre prepare the force activities and better informs EOD operators to defeat the device. Exercises such as Ex MR and Ex UNIFIED RESOLVE (UR) could benefit from the enhanced scenario design demonstrated on Ex AD in order to allow attack the network activities to take place. Additionally, the CA needs to recognize the benefit of the TE course and support it before the CA looses all residual knowledge.

Defeat the Device

8. COL Kavanaugh, the deputy Director of the NATO C-IED Centre of Excellence notes that C-IED is often viewed synonymously as EOD or IEDD.²⁴ However, he also notes that it is wrong to do so, as EOD is just one pillar of the defeat the device line of operation. Activities that are often associated with "defeating the device" are detect, protect, mitigate and neutralize. Yet only the neutralize function is a task of the engineers. Defeating the device requires appropriate intelligence surveillance and reconnaissance (ISR) plans and varying degrees of information operations and influence activities (IO/IA) and tactical searches in order to *detect* a threat.²⁵ Organizations need to use appropriate force protection while applying stand-off and ECMs to *protect* the force, while also *mitigating* threats by applying SOPs, lessons learned and tactical searches. These activities demonstrate the importance of maintaining a vested interest in "defeating the device" and C-IED as a whole, as it is clearly not an engineer only problem. Additionally, Combat Engineers are a limited resource and EOD qualified personnel even

²⁰ Ex ARDENT DEFENDER Brief date 19 Nov 2020; additionally, I had the chance to visit Ex AD in 2016 and was able to explore the complexities of the scenarios and how the lab was incorporated.

²¹ Ex ARDENT DEFENDER Overview deck.

²² COL Kavanaugh, "Engaging the Global C-IED Fight".

²³ Personal correspondence from Major Jayson Geroux, DS, Tactics School, CTC.

²⁴ COL Kavanaugh, "Engaging the Global C-IED Fight".

²⁵ Canada, *B-GL-365-021/FP-001*, 6-2-1 to 6-2-3.

less so. Furthermore, the RCAF has in the past augmented CA EOD teams with their EOD qualified ammo technicians; however, they have not sent anybody on course since 2012²⁶, stressing the CAF's ability to respond to events.

9. Collective training events such as Ex MR should be reviewed to ensure there is enough scenario design and events that allow for the PTA to execute "defeat the device" activities. This stems from having an appropriately developed scenario (with help from JCET), which enables the OPP to shape the tactical activities in the form of detect, protect, mitigate and neutralize. This may in turn also pressure the engineer units to support the brigade staffs with an EOD coordination cell, which has been absent at both Ex MR and EX UR.²⁷

CONCLUSION

- 10. C-IED is not just an engineer problem, it is multidisciplinary. The CA is losing sight of this fact and is losing interest in maintaining the C-IED capability. However, soldiers continue to operate in regions where this threat exists and arguably will always exist. It took years for the CAF to become proficient in each of the lines of operation of C-IED (prepare the force, attack the network, defeat the device) in Afghanistan, so why are we now losing interest in C-IED? In large part this has to do due with the fact that the CA is no longer operating in a *high threat* IED environment and have become ok with relegating C-IED to the back of the line.
- 11. Soldiers do receive basic IED foundational training via DP one and two, which is reinforced by ETHAR training prior to deployment but beyond that, there is no standardized individual training that emphasis IEDs on a regular basis, much like that of personal weapons training. Collective training events such as Ex MR provide an excellent venue to both prepare the force and defeat the device but, IED events are generally not prioritized and are not common, with preference towards maintaining manoeuvre force momentum. Hence, why EROC is no longer deployed to Ex MR, and engineer units will only bring a minimal (if any) EOD capability.
- 12. Exercises such as Ex AD highlight how a well designed scenario enables exploitation and analysis of IED scenes that support "attacking the network". But, it is the only exercise that does so and it still falls short of truly attacking the network, as it is not linked to any maneuver exercise where commanders and staff can integrate both exploitation and analysis into the OPP. Highlighting how little the CA has paid attention to "attacking the network", is the fact that the TE course and C-IED cell within CTC have now been stood down due to a lack of participation and interest.
- 13. C-IED is usually considered to be synonymous to EOD. But that assumption could not be more wrong. The only part of the C-IED process where engineers have the primary task, is the neutralization of the device. The remaining defeat the device

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²⁶ Personal correspondence with Maj Joseph Gonneau, OC EOD/ADC, CFSME.

²⁷ I was the lead Engr OCT for Ex MR 19, EX MR 20 (did not run but there was no EOD CC planned), Ex UR 19 and Ex UR 20.

activities, and C-IED lines of operations, is a comprehensive approach that is becoming neglected. Even the engineer's capability to neutralize devices is in question with a waning EROC capability, no effective ECMs and a diminishing amount of EOD operators.

RECOMMENDATION

- 14. It is the author's recommendation that the CA evaluate whether the maintenance of a C-IED capability is only necessary if we are currently operating in a high threat IED environment. The stance of this paper is that we need to do significantly more to maintain this capability and cannot wait until operating in another high threat environment to pay attention. It is complex, multidisciplinary, and requires soldiers, commanders and staff to be educated on C-IED and understand how they can enable it. Once the CA loses its residual knowledge of C-IED, it will take significantly more effort to re-invest vice maintaining it. This can be accomplished by:
 - a. Requiring ETHAR level one to be mandatory annual IBTS, with the goal of having enough residual knowledge in units to execute the training without the need for engineers;
 - b. Exploit technology and systems such as EFIT to give soldiers increased access to understanding IED threat environments;
 - c. Develop the scenarios of collective training exercise such as Ex MR and UR to incorporate what has already been developed by Ex AD, enabling both attack the network and defeat the device activities; and
 - d. Re-invest into the maintenance of EROC, ECM and TE.

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