





# CLOSE COMBAT AND ADAPTIVE DISPERSED OPERATIONS: FROM THEORY TO PRACTICE Major Jack P. Nguyen

### **JCSP 47**

### **Service Paper**

#### Disclaimer

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2021,

#### **PCEMI 47**

## Étude militaire

#### Avertissement

Les opinons exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale, 2021..



#### CANADIAN FORCES COLLEGE - COLLÈGE DES FORCES CANADIENNES

JCSP 47 - PCEMI 47 2020 - 2021

#### SERVICE PAPER – ÉTUDE MILITAIRE

# CLOSE COMBAT AND ADAPTIVE DISPERSED OPERATIONS: FROM THEORY TO PRACTICE

By Major Jack P. Nguyen

"This paper was written by a candidate attending the Canadian Forces College in fulfillment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence."

« La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale. »

Word Count: 2,337 Nombre de mots : 2.337

# CLOSE COMBAT AND ADAPTIVE DISPERSED OPERATIONS: FROM THEORY TO PRACTICE

#### **AIM**

1. This service paper aims to review the modern employment of medium land forces and make recommendations to the Canadian Army for a method to proliferate its Close Combat and Adaptive Dispersed Operation (ADO) concept. The French Armée de Terre's limited Mali campaign, Operational *Serval*, and the recent Armenia-Azerbaijan conflict in Nagorno-Karabakh offer context and lessons learned. Canada's two closest allies, the United Kingdom and the United States, have established purpose-built organizations to train, exercise, and develop their modern medium land forces concepts. Discussed within are the merits and drawbacks of both examples. The United States Army, for example, has created a Stryker Warfighters' forum to advance the concepts of Stryker warfighting and close the gap between doctrine and practice. The Canadian Army should form a purpose-built manoeuvre organization to adopt and expand the ADO concept. It should also create a similar warfighting forum to the United States to increase understanding and build upon the ADO warfighting body of knowledge.

#### INTRODUCTION

- 2. According to the Canadian Army, "The world is increasingly multi-polar with a higher number of actors able to exert regional and international influence." Armed engagements in regional conflicts continue to present cases where land forces face near-peer adversaries with robust intelligence, surveillance, target acquisition, and reconnaissance capabilities (ISTAR) that defeat contemporary land forces. Examples include the recent conflict in Nagorno-Karabakh between Azerbaijan and Armenia, and in Eastern Ukraine with the Russian annexation of Crimea. Also, regional conflicts requiring rapidly deployable forces such as the Islamist militant offensive in Mali have proliferated. To counter these modern threats, the Canadian Army's vision includes that it "will employ adaptive dispersion—the ability to operate widely dispersed yet retain the ability to aggregate rapidly to concentrate combat power—to attain its tactical and operational goals." The capstone Canadian Army guidance, Advancing with Purpose, further articulates that "[t]he principles and deductions [concerning adaptive dispersed operations] contained in Close Engagement are to be understood and incorporated by all Canadian Army members."
- 3. Unfortunately, ADO's operationalization and its adoption as a warfighting culture for a medium land force have not made serious inroads in the Canadian Army. As of 2019, ADO has not permeated throughout the Canadian Army to the point where it is well understood and

<sup>&</sup>lt;sup>1</sup> Canada. Department of National Defence, *A-PP-106-000/AF-001 Advancing with Purpose: The Canadian Army Modernization Strategy*, 4th ed. (Ottawa, ON: HQ, Canadian Army, 2020), 7.

<sup>&</sup>lt;sup>2</sup> Canada. Department of National Defence, 15.

<sup>&</sup>lt;sup>3</sup> Canada. Department of National Defence, 27.

exercised at the operational and tactical levels.<sup>4</sup> Well-intentioned leaders who follow doctrinal developments and apply them within their organizations often facilitate ADO advancements; however, widespread sharing of results, challenges, solutions, and best practices is lacking.<sup>5</sup> Part of this lack of penetration is due to the limited understanding, education, and practice by junior tactical leaders. The Canadian Army has not structured itself in a way that emphasizes ADO. In contrast, our closest allies, the United Kingdom and the United States, have established physical and cognitive structures to embody an adaptive and dispersed operational mindset. This paper analyzes recent land campaigns that suggest why the Canadian Army should continue implementing and adapt ADO, explores partnered force developments similar to ADO, and makes recommendations on how the Canadian Army should increase a mindset change towards ADO. While Canadian Army doctrine outlines close engagement and close combat as operational mindsets, this analysis focuses specifically on how close combat is expressed through ADO.<sup>6</sup>

#### **DISCUSSION**

#### **Contemporary ADO Requirement**

4. The Canadian Army's ADO aims to deploy rapid and scalable combat forces that can "employ coordinated actions by widely dispersed teams to achieve effects in support of an operational design" and at the same time maintain the "ability to aggregate rapidly to concentrate combat power." Two contemporary examples that suggest a requirement for ADO are the Nagorno-Karabagh conflict and the French defeat of Islamic militants in Mali during Operation *Serval*. Both cases underscore the need to move beyond merely espousing ADO as a conceptual way of war to inculcating it within the Canadian Army through an operationalized structure.

#### Nagorno-Karabakh Conflict 2020

5. In the Fall of 2020, a long-standing conflict between Azerbaijan and Armenia re-ignited over the Azerbaijani territorial claims over the ethnically Armenian populated NagornoKarabakh within Azerbaijan. The flash up lasted until a Russian brokered cease-fire ended it in

<sup>&</sup>lt;sup>4</sup> Based on discussions with Canadian Army leaders at the rank of Master Warrant Officer, Captain, and Major from 1 Canadian Mechanized Brigade Group manoeuvre units who have participated in individual and collective training from 2016-2019. In addition, the author was a planner and participant in both individual and collective training at level 5 and 6 from 2016-2019.

<sup>&</sup>lt;sup>5</sup> Eric Angell, telephone conversation with author, 31 January 2021. Lieutenant-Colonel Eric Angell was the Commanding Officer, Lord Strathcona's Horse (Royal Canadians) Battle Group and participated in Exercise Maple Resolve 2019. He subsequently deployed as the enhanced Forward Presence Battle Group Commanding Officer on Canada's Operation REASSURANCE in Latvia.

<sup>&</sup>lt;sup>6</sup> Canada. Department of National Defence, *Close Engagement Land Power in an Age of Uncertainty* (Kingston, ON: Canadian Army Land Warfare Centre, 2019),

http://publications.gc.ca/collections/collection\_2019/mdndnd/D2406-2019-eng.pdf.

<sup>&</sup>lt;sup>7</sup> Canada. Department of National Defence, 17.

November 2020. The conflict was notable in its widespread destruction of heavy armour on both sides and "the heavy use of missiles, drones, and rocket artillery." Azerbaijani forces maintained technical air superiority over Armenian forces, rendering Armenian land forces highly susceptible to connected indirect and precision fires. Researchers Shaan Shaikh and Wes Rumbaugh from the Centre for Strategic and International Studies identify the need for passive defensive measures to protect land forces from detection from ISTAR and destruction from longrange fires. Jack Watling, Research Fellow at the Royal United Services Institute, highlights how the saturation of ISTAR capability, similar to this operation, fuels the United Kingdom's move towards a dispersed and mobile Strike capability. He also suggests that armour forces remain tactically relevant since they offer the best available protection against aerial attack and are critical to the land battle once aggregated at the decisive point. Exercising the ADO mentality to defeat a near-peer adversary will be necessary for the Canadian Army to prepare for warfighting in the future security environment.

#### Operation Serval – French Forces in Mali

6. In January 2013, French forces rapidly deployed to Mali to defeat Islamist insurgents who threatened to overtake the country. <sup>10</sup> France's Operation *Serval* show-cased how strategically expedient forces that rapidly aggregate can provide operational success on a modern battlefield. Indeed, the French victory in rapidly deploying a warfighting force to Operation *Serval* led the British Army to consider the Strike concept to achieve similar strategic mobility. <sup>11</sup> France's success relied on many factors such as regional sustainment capacity, regional understanding and intelligence expertise, and readily deployable troops. <sup>12</sup> One aspect that bears consideration for the Canadian Army was France's capacity to leverage high-speed intra- and inter-theatre mobility with a medium force. Once in theatre, French forces executed an audacious offensive to defeat Islamist militants that capitalized on tactical and operational mobility. France advanced over 1,700 km in a span of fewer than 30 days, relying on its

<sup>&</sup>lt;sup>8</sup> Shaan Shaikh and Wes Rumbaugh, "The Air and Missile War in Nagorno-Karabakh: Lessons for the Future of Strike and Defense," Center for Strategic and International Studies, December 8, 202AD, https://www.csis.org/analysis/air-and-missile-war-nagorno-karabakh-lessons-future-strike-and-defense. <sup>9</sup> Shaikh and Rumbaugh.

<sup>&</sup>lt;sup>9</sup> Jack Watling, "The Key to Armenia's Tank Losses: The Sensors, Not the Shooters | RUSI," *RUSI Defence Systems* 22, no. 1 (October 6, 2020), https://rusi.org/publication/rusi-defence-systems/key-armenia-tanklossessensors-not-shooters.

Michael Shurkin, "What It Means to Be Expeditionary: A Look at the French Army in Africa," *Joint Forces Quarterly* 82, no. 3 (2016): 76–85, https://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-82/jfq-82\_7685\_Shurkin.pdf%0Ahttp://ndupress.ndu.edu/JFQ/Joint-Force-Quarterly-82/Article/793271/what-it-means-tobeexpeditionary-a-look-at-the-french-army-in-africa/.

<sup>&</sup>lt;sup>11</sup> Jack Watling and Justin Bronk, "Strike: From Concept to Force," *Royal United Services Institute Occasional Paper* June (2019): 1–20.

<sup>&</sup>lt;sup>12</sup> Shurkin, "What It Means to Be Expeditionary: A Look at the French Army in Africa." <sup>14</sup> Saint Quentin, "Premières Leçons Opératives de l'opération," 2013, 31–37.

mechanized forces to rapidly overtake Islamist and preventing them from large scale consolidation.<sup>14</sup>

7. For Canada to be expeditiously relevant in the future security environment, it must train its medium forces for rapid strategic deployment and exploit its tactical mobility. Learning key lessons about exploitation and maintaining the initiative from French Forces and adapting them to the Canadian context will enable future operational success for the Canadian Army. French forces pushed their operational reach to the limits of sustainment capacity to deny their enemy reprieve. Canada's doctrine espouses a similar approach to combat sustainment: "[w]hile redundancy is a tenet of logistics, over-redundancy can become very resource intensive and inefficient and should be reduced to an optimal level in an ADO construct." France's shift towards offensive action through tactical and strategic mobility following their drawn-out engagements in Afghanistan is a valuable vignette for the Canadian Army to consider as it organizes for future combat.

#### **United Kingdom Strike Formations**

- 8. The United Kingdom adjusted its force posture in 2015 to adapt to the future security environment. As part of the British Army 2020 Refine, a Strike Brigade and Strike Experimentation Group were established and equipped with Ajax Ares fighting vehicles. <sup>14</sup> The Strike Brigades will centre upon a forthcoming 8x8 wheeled Mechanized Infantry Vehicle awaiting procurement. According to William Owen, an analyst at the Royal United Services Institute (RUSI), "strike is about so much more than platform replacement and should be considered a highly deployable infantry force able to sustain movement, manoeuvre and long-range patrolling, under armour..." <sup>15</sup> By establishing a purpose-designed medium capability with longer than heavy operational reach, the Strike concept becomes a living and working reality for members within the organizations, and across the British Armed forces.
- 9. The British are using the Strike formations to test and adjust how their medium land forces will operate in the future security environment. By dedicating resources to the concept, they can test doctrine, tactics, techniques, and procedures to identify and mitigate gaps in the concept, such as the vulnerability upon aggregation, and problems such as force sustainment across a dispersed operating area. "Strike is about doing things that neither heavy nor light forces can do, based on their equipment, capability and sustainment." As the formations exercise over great distances to maximize the potential of long operational reach up to 2000 km, they exercise the command and control and sustainment challenges that follow. Doing so allows preparing the entire force, from the private soldier to Brigade headquarters and 3<sup>rd</sup> line sustainment, for

<sup>&</sup>lt;sup>13</sup> Canada. Department of National Defence, *A-PP-106-000/AF-001 Advancing with Purpose: The Canadian Army Modernization Strategy*, 35.

<sup>&</sup>lt;sup>14</sup> United Kingdom. Ministry of Defence, "Future of the Army | The British Army," The British Army, accessed January 28, 2021, https://www.army.mod.uk/who-we-are/future-of-the-army/; Watling and Bronk, "Strike: From Concept to Force."

<sup>&</sup>lt;sup>15</sup> William Owen, "Explaining the British Army's Strike Concept," *Rusi* 37, no. 4 (2017): 1, https://rusi.org/sites/default/files/201709 newsbrief 37.4 owen final.pdf. <sup>18</sup> Owen, 3.

<sup>&</sup>lt;sup>16</sup> Watling and Bronk, "Strike: From Concept to Force."

adaptive dispersed operations. The soldiers and teams work through the Strike concept and refine it for modern conflict. Additionally, the exercise of Strike capabilities tests the "attendant levels of support" such as "sustainment, recovery, and bridging" to prepare them in terms of practicality and doctrine for an armed conflict. Without a unit whose purpose is fielding the Strike capability, these experiences and lessons learned are left to the field force to generate organically, a process which could be slow and ineffectual such as that of ADO in the Canadian Army.

The British Army began fielding in 2019 the Ajax armoured vehicle, a medium-heavy 10. tracked armoured vehicle equipped with 40mm cannon and is integrating them into the Strike formations. 18 As the new capability comes on-line, Strike formations will have the opportunity to exercise them in concert with the evolving Strike doctrine. Research fellows Jack Watling and Justin Bronk at RUSI identify some integration factors that arise when adding a medium tracked capability to a high-speed Strike formation. They suggest that the Ajax is more suited to conducting forward screening and counter moves capability, similar to how Canada employed the Leopard C2 as a guard and counter-moves force, due to its size, slower mobility, and support requirements. 19 General Nicholas Carter, British Armed Forces' Chief of the Defence Staff, noted that "we are testing [Strike] at the moment through a programme of experimentation and we are learning very good lessons."<sup>23</sup> UK's 3<sup>rd</sup> Division, Strike brigade's parent headquarters, exercises the Strike concept during Division planning exercises, exposing valuable lessons and critical shortfalls and opportunities.<sup>20</sup> Regardless of how Strike is eventually employed, having a structure around which the implementation can unfold under the Strike concept will provide vast sums of operational data points and expertise.

#### **United States Army Stryker Warfighting**

11. Recognizing the need for strategic mobility and operational endurance in the early 2000s to counter European regional threats, the US Army began fielding units known as Stryker Brigade Combat Teams (SBCT). The intent was to establish a force that could rapidly deploy to a conflict hour (a goal of 96 hours) with the ability to defeat enemy armour and be self-sufficient until the arrival of heavier or task-organized forces. The force itself would also exploit its tactical mobility to "gain positional advantage through decisive speed and overwhelming operational tempo." The SBCT is a medium force purposely-designed to exploit its manoeuverability and staying-power on the battlefield. The SBCTs employ the General Dynamics Stryker family of

<sup>&</sup>lt;sup>17</sup> Owen, "Explaining the British Army's Strike Concept," 3.

<sup>&</sup>lt;sup>18</sup> United Kingdom. Ministry of Defence, "First Ares Armoured Vehicles Delivered to the Army," British Army, July 27, 2020, https://www.army.mod.uk/news-and-events/news/2020/07/first-ares-armouredvehiclesdelivered-to-the-army/.

<sup>&</sup>lt;sup>19</sup> Watling and Bronk, "Strike: From Concept to Force."

<sup>&</sup>lt;sup>23</sup> Nicholas Carter, in Watling and Bronk.

<sup>&</sup>lt;sup>20</sup> Manuel Pelletier-Bedard, telephone conversation with author, 31 January 2021. Major Pelletier-Bedard is Canadian exchange officer, currently SO1 to G5 (Plans) at 3<sup>rd</sup> (United Kingdom) Division.

<sup>&</sup>lt;sup>21</sup> Alan Vick et al., *The Stryker Brigade Combat Team: Rethinking Strategic Responsiveness and Assessing Deployment Options* (Santa Monica, CA: RAND Corporation, 2002), 5.

vehicles, 8x8 wheeled light armoured vehicles with infantry, mortar, support, and mobile gun system variants.

12. With the increase in multi-polar rivalries from China and Russia, there is a growing concern among US forces indicating that they will require a heavier and more prescriptive mass warfighting style.<sup>22</sup> This line of thinking contrasts with the high manoeuvrability and dispersed operations suggested by the SBCT concept. To ensure continuous development and refinement of Stryker tactics, the US Army created the SBCT Warfighters' Forum, "a networked and collaborative means of sharing information that leverages modern computer based technologies to facilitate the exchange of information."<sup>23</sup> Researchers at RAND found that the Stryker Warfighter's Forum increased training success and reduced the Stryker organizations' development burden.<sup>24</sup> Furthermore, the establishment of a development forum and the championship of Stryker warfighting by the US I Corps Commander as the senior mentor create a stabilizing presence for the Stryker community.<sup>29</sup> In 2020, the US Army published an update to the 2016 Army Techniques Publication that "provides doctrinal framework for techniques for the Stryker brigade combat team (SBCT) Infantry rifle company within the SBCT Infantry battalion."<sup>25</sup> The purpose-built organizations centred around a warfighting concept enable the evolution of doctrine and tactics, techniques, and procedures to meet the realities of the current operating environment.

#### CONCLUSION

13. The Canadian Army's Close Engagement and its subordinate concepts of Close Combat and ADO deserve greater attention to prepare its land forces for the future security environment. While it has been present for several years as a fundamental element of fighting land operations, its adoption has been marginal at best, despite the best effort of tactical leaders. Modern cases of conventional armed conflict expose the ubiquity of ISTAR, precision fires, and risk to land forces, as well as the potential for medium forces to excel through dispersed operations and strategic to tactical mobility. The United Kingdom has established a Strike Brigade and experimentation group to further the concept, and the United States has fielded Stryker Brigade Combat Teams and a warfighters' forum to close the between doctrine and practice. The Canadian Army can benefit from our closest allies' experiences in the ADO concept operationalization.

<sup>&</sup>lt;sup>22</sup> Joshua Powers, telephone conversation with author, 31 January 2021. Lieutenant-Colonel Joshua Powers is a former US Stryker Brigade Combat Team S3 and Stryker infantry batallion Executive Officer.

<sup>&</sup>lt;sup>23</sup> Bryan Hallmark and S. Gayton, "Army Warfighters' Forums Can Be Innovative and Successful," *RAND Research Briefs*, 2020, 1, https://doi.org/10.7249/rb9630.

<sup>&</sup>lt;sup>24</sup> Hallmark and Gayton, "Army Warfighters' Forums Can Be Innovative and Successful." <sup>29</sup> Joshua Powers, 2021.

<sup>&</sup>lt;sup>25</sup> Daniel Gonzales et al., Network-Centric Operations Case Study, 2005.

#### RECOMMENDATION

- 14. The Canadian Army should investigate the establishment of a purpose-designed combat organization to model ADO, similar to the constructs of the United Kingdom Strike Brigade and United States SBCT. This organization should be resourced with adequate combat support, combat service support, and echelon enablers to practice adaptive dispersion, as detailed in Close Engagement. Resources should draw from other organizations and be considered an investment into the proliferation of a warfighting concept for the future. The organization's size, location, and structure are agnostic, so long as it is adequately resourced and provided with a conceptual foundation of experimentation and ADO development.
- 15. Furthermore, the Canadian Army should establish a Close Engagement warfighter's forum to further the force's ADO concept penetration. The Canadian Army must resource this team to leverage modern communications technologies and adequately staff it with experienced operators and researched analysts. The team must conduct this task as a primary role and be connected with the field force both domestically and on operations. A senior Canadian Army representative should also champion the program to lend credibility and momentum.

<sup>&</sup>lt;sup>26</sup> Canada. Department of National Defence, Close Engagement Land Power in an Age of Uncertainty.

#### **BIBLIOGRAPHY**

- Canada. Department of National Defence. *A-PP-106-000/AF-001 Advancing with Purpose: The Canadian Army Modernization Strategy.* 4th ed. Ottawa, ON: HQ, Canadian Army, 2020.
- ———. Close Engagement Land Power in an Age of Uncertainty. Kingston, ON: Canadian Army Land Warfare Centre, 2019.
  http://publications.gc.ca/collections/collection\_2019/mdn-dnd/D2-406-2019-eng.pdf.
- Gonzales, Daniel, Michael Johnson, Jimmie McEver, Dennis Leedom, Gina Kingson, and Michael Tseng. *Network-Centric Operations Case Study*, 2005.
- Hallmark, Bryan, and S. Gayton. "Army Warfighters' Forums Can Be Innovative and Successful." *RAND Research Briefs*, 2020. https://doi.org/10.7249/rb9630.
- Owen, William. "Explaining the British Army's Strike Concept." *Rusi* 37, no. 4 (2017): 4. https://rusi.org/sites/default/files/201709\_newsbrief\_37.4\_owen\_final.pdf.
- Quentin, Saint. "Premières Leçons Opératives de l'opération," 2013, 31–37.
- Shaikh, Shaan, and Wes Rumbaugh. "The Air and Missile War in Nagorno-Karabakh: Lessons for the Future of Strike and Defense." Center for Strategic and International Studies, December 8, 202AD. https://www.csis.org/analysis/air-and-missile-warnagornokarabakhlessons-future-strike-and-defense.
- Shurkin, Michael. "What It Means to Be Expeditionary: A Look at the French Army in Africa." *Joint Forces Quarterly* 82, no. 3 (2016): 76–85. https://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-82/jfq-82\_7685\_Shurkin.pdf
- United Kingdom. Ministry of Defence. "First Ares Armoured Vehicles Delivered to the Army." British Army, July 27, 2020. https://www.army.mod.uk/newsandevents/news/2020/07/first-ares-armoured-vehicles-delivered-to-the-army/.
- ------. "Future of the Army | The British Army." The British Army. Accessed January 28, 2021. https://www.army.mod.uk/who-we-are/future-of-the-army/.
- Vick, Alan, David Orletsky, Bruce Pirnie, and Seth Jones. *The Stryker Brigade Combat Team:* Rethinking Strategic Responsiveness and Assessing Deployment Options. Santa Monica, CA: RAND Corporation, 2002.
- Watling, Jack. "The Key to Armenia's Tank Losses: The Sensors, Not the Shooters | RUSI." RUSI Defence Systems 22, no. 1 (October 6, 2020). https://rusi.org/publication/rusidefence-systems/key-armenia-tank-losses-sensors-notshooters.

Watling, Jack, and Justin Bronk. "Strike: From Concept to Force." *Royal United Services Institute Occasional Paper* June (2019): 1–20.

https://rusi.org/publication/occasionalpapers/strike-concept-force