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SIMILAR IN NAME BUT NOT IN NATURE: A COMPARISON OF AUSTRALIAN AND CANADIAN FUTURE LAND OPERATING CONCEPTS

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Exercise Solo Flight

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EXERCISE *SOLO FLIGHT* – EXERCICE *SOLO FLIGHT*

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AIM

1. The aim of this service paper is to review the future land operating concepts of the Canadian Army and Australian Army in order to identify key differences. Despite sharing many similarities, important distinctions exist between how each nation anticipates employing land power in the future. By analyzing these differences the land forces of both nations can learn from each other, identify blind spots and further refine their operating concepts.

INTRODUCTION

2. This paper will examine the future land operating concepts developed by each nation in response to the challenges presented in their anticipated future operating environment. For the Australian Army this includes the Future Land Warfare Report and Adaptive Campaigning Future Land Operating Concept.¹ For the Canadian Army this includes the Future Security Environment and Adaptive Dispersed Operations Concept.²

3. The first and second section of this paper will review Australia and Canada's future land operating concepts respectively. The third section will elaborate on key differences that are relevant to the Canadian Army and their future land operating concept. Finally, recommendations

¹ Australian Army Headquarters, *Future Land Warfare Report 2014* (Canberra, ACT: Commonwealth of Australia, 2014); Australian Army Headquarters, *Adaptive Campaigning: Army's Future Land Operating Concept* (Canberra, ACT: Commonwealth of Australia, 2009).

² Department of National Defence, *The Future Security Environment 2013-2040* (Ottawa, ON: National Defence Headquarters, 2014); Department of National Defence, *Adaptive Dispersed Operations: The Force Employment Concept for Canada's Army of Tomorrow* (Kingston, ON: Army Publishing Office, 2009).

will be provided regarding the elements of Australia's future land operating concept that could be incorporated into Canada's future land operating concepts and how this might be achieved.

4. The desired end state for this paper will be twofold. Explicitly it will identify key differences, which having been assessed for relevance, can be considered for incorporation into future Canadian land operating concepts. Implicitly, it will stimulate greater discussion of these operating concepts as they approach their 10 year anniversaries.

DISCUSSION

Review of Canada's Future Land Operating Concept

5. Canada's Adaptive Dispersed Operations Concept is based on the integration of five subordinate functional concepts. These are Agility, Network Enabled, The Soldier, Integrated Effects and Sustainment.³

6. Agility refers to the Canadian Land Force requirement to rapidly project modular, mission tailored forces that can be regrouped and re-tasked across the spectrum of conflict.⁴ This will allow dispersed Canadian Land Forces to act in concert throughout the non contiguous battlespace. This functional concept is supported by the enabling concepts of Omni-Dimensional Shield and Full Spectrum Engagement. The assessed capability demands of Canadian Land Force Agility include:

³ Department of National Defence, *Adaptive Dispersed Operations...*, 11; Department of National Defence, *Toward Land Operations 2021: Studies in Support of the Army of Tomorrow Force Employment Concept* (Kingston, ON: Army Publishing Office, 2009), 9-17.

⁴ Department of National Defence, *Adaptive Dispersed Operations...*, 32.

- (1) Rapid force projection which is enabled by joint assets such as fast shipping and strategic airlift
- (2) Independent intra-theatre movement and manoeuvre.
- (3) Adaptive human minds that have been trained for complex, dispersed operations.
- (4) Survivable sustainment that is prepared to fight and support in a non contiguous area of operations.
- (5) Tactical self sufficiency that provides commanders with the freedom of action to exploit success or respond to emerging crisis.

7. Network Enabled refers to the Canadian Land Force requirement to integrate information and weapon systems in order to gain knowledge and fire superiority over an adversary.⁵ This functional concept is supported by the enabling concepts of Sensor Fusion, Knowledge Management and Joint Fire Support. The assessed capability demands of a Network Enabled Canadian Land Force include:

- (1) Robust connectivity that connects force elements to joint sensors, fires and command systems. This will enable shared situational awareness, collaboration and self synchronization.
- (2) Quality information that is analyzed and distributed in near real time in order to enable simultaneous action and decentralized decision making.
- (3) Resilient networks that are secure and dependable.

⁵ Department of National Defence, *Adaptive Dispersed Operations...*, 22.

8. The Soldier refers to those personnel who volunteer to serve in the Canadian Land Forces and broadly encompasses the human dimension of war.⁶ This functional concept is supported by the enabling concepts of a Command and Battle Grouping. The assessed capability demands of the Canadian Land Force Soldier include:

- (1) Clothing and equipment that enhance soldier's lethality, survivability, sustainability, mobility and communications.
- (2) Individual performance that is physically, intellectually, emotionally and socially competent.
- (3) Ethical conduct that reflects Canadian values, the military ethos and respects the dignity of all persons.

9. Integrated Effects refer to the creation of multidimensional effects spanning from the strategic level to the tactical level.⁷ This functional concept is supported by the enabling concepts of Joint Fire Support and Joint, Interagency, Multinational and Public (JIMP) Capable.⁸ The assessed capability demands of a the Integrated Effects concept include:

- (1) Strategic integration of other government agencies to concurrently achieve military, diplomatic and economic objectives.
- (2) Operational integration of joint and coalition capabilities to achieve synergistic battlespace effects.
- (3) Sharing of information and capabilities to enable other services, government agencies and allies.

⁶ *Ibid.*, 24.

⁷ Department of National Defence, *Adaptive Dispersed Operations...*, 30.

⁸ *Ibid.*, 4, 25-27.

10. Sustainment refers to the flexible, integrated and adaptive sustainment system that is essential to support dispersed operations.⁹ This functional concept is supported by the enabling concepts of Focus Logistics and Distributed Autonomous Systems. The assessed capability demands of the future Sustainment concept include:

- (1) Air assets that can provide medical evacuation and aerial resupply.
- (2) Integral protection that hardens and arms Combat Service Support (CSS) elements so they no longer present a soft target to the adversary.
- (3) Visibility that provides critical item tracking in transit and real time equipment health, enabling commanders to accept calculated logistical risk.
- (4) Reduced demand that leverages engineering solutions and technological advances to reduce CSS usage rates and improve the self sufficiency of dispersed elements.

11. These five subordinate functional concepts, and their underlying capability demands, are intended to provide the Canadian Land Force with the ability to realize their Adaptive Dispersed Operations Concept.

Review of Australia's Future Land Operating Concept

12. Australia's Adaptive Campaigning Future Land Operating Concept proposes a conceptual framework based on five interdependent lines of operation. These are Joint Land Combat, Population Protection, Information Actions, Population Support and Indigenous Capacity Building.¹⁰ Each will be reviewed and key differences identified for subsequent analysis in this paper.

⁹ *Ibid.*, 32.

¹⁰ Australian Army Headquarters, *Adaptive Campaigning...*, iv.

13. Joint Land Combat includes those actions required to defeat organized resistance and secure the area of operations.¹¹ It is performed in order to establish and maintain the conditions required for the other lines of operations. The Australian Army intends to achieve this through a number of subordinate concepts. These include:

- (1) Comprehensive action that engages enemy forces using all available joint effects.
- (2) Continuous battle that denies the enemy any respite or time to adapt.
- (3) Distributed manoeuvre that allows land forces to achieve a persistent and pervasive presence in complex terrain, whilst not presenting a readily targetable mass.
- (4) Dynamic sensor-shooter coupling that provides distributed tactical commanders with access to operational and strategic strike capabilities.
- (5) Focused understanding that can identify the enemy in complex terrain and distribute this intelligence in real time.
- (6) Battlespace isolation that cuts the enemy's command and sustainment lines of communication.
- (7) Achieving the dominant response by rapidly aggregating joint fires to achieve larger scale effects, whilst reducing the enemy's response through counter-fires that intercept incoming non line of sight weapons.
- (8) Mission orientated force protection that will conserve land forces and which is tailored to specific circumstances rather than imposed force wide.

14. These subordinate concepts create a number of capability demands for Intelligence, Surveillance, Target Acquisition, Reconnaissance and Electronic Warfare (ISTAREW), joint fires, protected logistics, rapid regrouping, adaptive forces and Ground Based Air and Missile

¹¹ *Ibid.*, 28.

Defence (GBAMD).¹² The requirement for GBAMD is a key difference between the Australian and Canadian future operating concepts.

15. Population Protection includes those actions required to provide security and protection to vulnerable populations.¹³ It is performed in order to establish the conditions for law and order to prevail. The Australian Army intends to achieve this through a number of subordinate concepts.

These include:

- (1) Security operations that minimise fear and violence by protecting property and enhancing public safety.
- (2) Policing actions that gather evidence, apprehends criminals and dispenses justice.
- (3) Population control that establishes dominion over the population's homes, movement and identity in order to improve their safety and protection.
- (4) Hazard control that secures weapons and reduces environmental hazards.
- (5) Reintegration and disbandment actions that demobilize adversarial groups.

16. These subordinate concepts create a number of capability demands for non-lethal fighting, specialist engineering, linguists, cultural advisors, deployable police and interagency doctrine.¹⁴ However, the requirement for interagency doctrine is unique and a key difference between the Australian and Canadian future operating concepts.

17. Information Actions include those activities which shape and inform the understanding, perceptions, attitudes and behaviour of a target group, whilst assuring the quality of our own

¹² Australian Army Headquarters, *Adaptive Campaigning...*, 66-67.

¹³ *Ibid.*, 28.

¹⁴ Australian Army Headquarters, *Adaptive Campaigning...*, 68-69.

information.¹⁵ The Australian Army intends to achieve this through a number of subordinate concepts. These include:

- (1) Influence operations that discredit enemy propaganda, strengthen friendly loyalties and win over uncommitted parties.
- (2) Counter command operations that are intended to deceive or destroy enemy command and control systems, disrupt and degrade enemy situational awareness systems, and undermine the enemy confidence in these systems.
- (3) Command and information protection actions that protect land force commanders and the systems they depend upon.

18. These subordinate concepts create a number of capability demands for information management, electronic warfare, societal assessment mechanisms and counter leadership operations.¹⁶ The key difference between the Australian and Canadian future operating concepts is counter leadership operations.

19. Population Support includes those actions required to alleviate immediate human suffering and to establish essential services.¹⁷ This will positively influence the population and their perceptions towards friendly land forces. The Australian Army intends to achieve this through two subordinate concepts. These are:

- (1) Emergency relief that mitigates the negative effects of human conflict, natural disasters and civil collapse by delivering essential commodities.

¹⁵ *Ibid.*, 28.

¹⁶ Australian Army Headquarters, *Adaptive Campaigning...*, 69-70.

¹⁷ *Ibid.*, 28.

- (2) Emergency reconstruction expediently rebuilds or restores essential services and infrastructure in order to sustain the affected society.

20. These subordinate concepts create a number of capability demands for interagency integration, specialist engineering, transition mechanisms and latent capacity.¹⁸ The key difference between the Australian and Canadian future operating concepts is the identification of a need for latent capacity in order to conduct population support effectively.

21. Indigenous Capacity Building includes those actions designed to build capacity in civil communities, while also establishing the longer term governance and socio-economic structures to meet the needs of the population.¹⁹ This is done in order to promote long term stability and enable the withdrawal of military forces. The Australian Army intends to achieve this through a number of subordinate concepts. These are:

- (1) Effective indigenous government which establishes a functional public service, fair electoral processes and robust policy development capability.
- (2) Civil infrastructure development enables effective governance, sustainable economic development and government presence in communities.
- (3) Security sector reform that develops effective, legitimate and accountable security institutions. This includes the judiciary, police and armed forces.
- (4) Stable economic development which includes whole of government efforts to create enduring stability and prosperity for the host nation.

¹⁸ *Ibid.*, 71.

¹⁹ Australian Army Headquarters, *Adaptive Campaigning...*, 28.

- (5) Civil society development which establishes enduring societal values and behaviours that are conducive to long term stability.

22. These subordinate concepts create a number of capability demands including a greater understanding of societal development, ability to empower indigenous agencies and progress monitoring mechanisms.²⁰ The key difference between the Australian and Canadian future operating concepts is the degree of understanding of societal development each requires of their land forces.

23. These five interdependent lines of operation, their subordinate concepts and underlying capability demands are intended to provide the Australian Land Force with the ability to realize their Adaptive Campaigning Future Land Operating Concept. Whilst similar in name, the Canadian and Australian future land operating concepts are different in nature. These differences will now be explored in greater detail.

Key Differences

24. The review Canadian and Australian future land operating concepts identified five key differences that could be relevant to the Canadian Army and their future land operating concept. These are the need for GBAMD, interagency doctrine, counter leadership operations, latent capacity for population support operations and greater understanding of societal development.

25. First, the Australian concept identifies the requirement for layered, integrated GBAMD and Counter Rocket, Artillery and Mortar (C-RAM) capabilities in order to enable expeditionary

²⁰ *Ibid.*, 71-72.

and dispersed land operations.²¹ Australia considers it vital to countering the proliferation of unmanned aerial vehicles, missiles, artillery and mortars.²² By contrast, the Canadian future land operating concept only mentions Ground Based Air Defence (GBAD) once and provides no detail.²³ As the Australian Army already operates a GBAD system, and is expanding this capability, the Canadian Army could benefit from their ally's knowledge in this area.²⁴

26. Second, the Australian concept articulates a need for interagency doctrine whilst the Canadian concept does not identify a similar requirement. As the Canadian Army seeks to create a JIMP-Capable Land Force, the development of interagency doctrine could be exceptionally useful.²⁵ Specifically, where the Canadian Land Force may be in a supporting role, interagency doctrine could establish a framework for cooperation with other government agencies. This may be an area where collaboration via the American, British, Canada and Australia (ABCA) Armies Program is possible.

27. Third, the Australian concept identifies a need to conduct counter leadership operations that are both kinetic and non kinetic.²⁶ The Canadian future operating concept does not identify an equivalent operation but still identifies the need to "disrupt the adversary's decision cycle and

²¹ Australian Army Headquarters, *Adaptive Campaigning...*, 47, 67.

²² *Ibid.*, 67.

²³ Department of National Defence, *Adaptive Dispersed Operations...*, 34.

²⁴ Australian Army, "16th Air Land Regiment: Royal Australian Artillery," last modified 14 December 2016, <https://www.army.gov.au/our-people/units/forces-command/6th-combat-support-brigade/16th-air-land-regiment-royal-australian>; Australian Strategic Policy Institute, "NASAMS and Australian Forward Force Protection," last modified 12 July 2017, <https://www.aspistrategist.org.au/nasams-australian-forward-force-protection/>; Australian Army News, "Quest for the bold and new," last modified 14 December 2017, <http://armynews.realviewdigital.com/#folio=8>; Janes, "NASAMS Selected for Australian Army GBAD System," last modified 11 April 2017, <http://www.janes.com/article/69475/nasams-selected-for-australian-army-gbad-system>.

²⁵ Department of National Defence, *Adaptive Dispersed Operations...*, 4, 25-27.

²⁶ Australian Army Headquarters, *Adaptive Campaigning...*, 70-71.

cohesion."²⁷ The Canadian Army could incorporate the Australian counter leadership operations into their future operating concept; however, these operations require robust situational awareness systems, responsive manoeuvre or strike assets and the correct command authorities so that high value targets can be pursued in real time.²⁸ These demands are not insignificant and would need to be considered in conjunction with the ethical expectations of the Canadian Army.

28. Fourth, only the Australian concept identifies a requirement for latent capacity to perform population support operations.²⁹ It explains that capacity which exceeds that required to sustain friendly military forces is necessary to meet the demands of population support operations.³⁰ By contrast, the Canadian future land operating concept notes "sustainment of forces in the future security environment will place extreme demands upon combat service support".³¹ These extreme demands risk leaving little or no residual capacity for population support activities that may be strategically significant.

29. Fifth, the Australian concept identifies a need for greater understanding of societal development within the land force. Their concept requires military commanders to truly appreciate the economic, political, legal and governance systems that underpin a society.³² Specifically, the Australian future land operating concept requires "key Land Force personnel to be broadly educated in the basics of civil governance, town planning, economic and political

²⁷ Department of National Defence, *Adaptive Dispersed Operations...*, 21.

²⁸ Australian Army Headquarters, *Adaptive Campaigning...*, 70-71.

²⁹ *Ibid.*, 71.

³⁰ *Ibid.*, 71.

³¹ Department of National Defence, *Adaptive Dispersed Operations...*, 33.

³² Australian Army Headquarters, *Adaptive Campaigning...*, 72.

systems."³³ The Canadian concept could benefit from a similar approach that truly leverages the strength of land forces – being on the ground.

CONCLUSION

30. This service paper has reviewed the Australian and Canadian future land operating concepts in order to identify the key differences between them. These differences have been considered for relevance and potential utility by the Canadian Army. They include GBAMD, interagency doctrine, counter leadership operations, latent capacity for population support operations and greater understanding of societal development. These have the greatest potential for incorporation into the Adaptive Dispersed Operations Concept or its successor.

RECOMMENDATIONS

31. As a result of this review and analysis, the following recommendations are made:
- (1) The Canadian Army engage the Australian Army in order to refine the GBAMD aspects of their Adaptive Dispersed Operations Concept.
 - (2) The Canadian Army and Australian Army collaborate on the development of interagency doctrine through the ABCA Armies Program.
 - (3) The Canadian Army incorporate counter leadership operations into the Adaptive Dispersed Operations Concept.
 - (4) The Canadian Army add latent capacity to the Adaptive Dispersed Operations Concept in order to enable population support operations.

³³ *Ibid.*, 72.

- (5) The Canadian Army educate key personnel in societal development to better enable indigenous capacity building operations.

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