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INTELLIGENCE CENTRIC APPROACH TO THE CF OPP

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Exercise Solo Flight

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The key to orchestrating a successful military campaign is to make the campaign planning process intelligence-centric and intelligence-led. History is replete with examples where “numerically inferior forces, armed with less capable technology, can win when leaders are armed with accurate intelligence”.¹ Paraphrasing Sun Tzu’s wisdom, know your enemy and yourself, and you will never be in danger, know the ground and weather as well, and your victory will be total.² When commanders are forewarned, they hold the keys to victory and this same sentiment is propounded by other great military thinkers such as Napoleon, Frederick the Great, Machiavelli, Clausewitz, and Antoine Jomini, which swiftly justifies the centrality of intelligence in campaign planning.³ Yet surprisingly, the Canadian Armed Forces Operational Planning Process (CF OPP) doctrine ignores history and sage advice and instead places intelligence in a restricted and subordinated role to an operations-centric approach to campaign planning. Limited largely to just two of the five CF OPP stages, intelligence is directed to deliver key products such as the threat & risk assessments, Intelligence Preparation of the Operation Environment (IPOE)

¹ Gregory Elder, “Intelligence in War: It Can Be Decisive,” last modified 26 June 2008, https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol50no2/html_files/Intelligence_War_2.htm. The author cites numerous battles across history to support his conclusion to include Bull Run (1861), Tannenberg (1914), Midway (1942), Inchon (1950) Six Day War (1967).

² “Know the enemy and know yourself; in a hundred battles, you will never be in peril. When you are ignorant of the enemy but know yourself your chances of winning or losing are equal. If ignorant both of your enemy and of yourself. Know the ground, know the weather; your victory will then be total.” Sun Tzu, *The Art of War*, trans. Samuel Griffiths (London: Oxford Press, 1963), 88.

³ “To reconnoitre accurately defiles and fords of every description. To provide guides that may be depended upon. To interrogate the cure and postmaster. To establish rapidly a good understanding with the inhabitants. To send out spies. To intercept public and private letters. To translate and analyse their contents. In a word, to be bale to answer every question of the general-in-chief; these are the qualities which distinguish a good general of advanced posts.” Napoleon, *the Military Maxims of Napoleon*, trans David Chandler (London: De Capo Press, 1995), 81; “One should know one’s enemies, their alliances, their resources, and nature of their country, in order to plan a campaign. One should know what to expect of one’s friends, what resources one has, and foresee the future effects to determine what one has to fear or hope from political maneuvers.” Frederick the Great, *Instructions for his Generals*, trans. Thomas Phillips (New York: Dover Publications, 2005), 24; “Nothing is more worthy of the attention of a good general than the endeavor to penetrate the designs of the enemy” Machiavelli, *Discourses* (New York: McGraw-Hill Publishers, 1950), 467; “Intelligence – every sort of information about the enemy and his country that serves as the basis of our own plans and operations” Carl Von Clausewitz, *On War*, trans. Michael Howards and Peter Paret (Princeton: Princeton University Press: 1976), 86; “Nothing should be neglected in acquiring a knowledge of the geography and military statistics of their state, so as to know their material and moral capacity for attack and defense as well as the strategic advantages of the two parties” Jomini, *The Art of War*, trans. Thomas Greiss (Westport: Greenwood Press, 1982), 45.

and war gaming support. When following the CF OPP, any positive impact these key products could have on operations is otherwise diminished because they are reactive, narrow in focus and linear in its analytical thinking.

The CF OPP is a vital and relevant doctrine to campaign planning. However, its operations-centric focus is misplaced. By making the planning process intelligence-focused and intelligence-led commanders and staffs would fully understand a problem before they developed a solution. This would yield more campaign victories as envisioned by Sun Tzu and the other great military thinkers than the current planning methodology can contrive today. To shift campaign planning towards an intelligence-centric approach, the CF OPP must embrace the concept of the dual role of intelligence in campaign planning. The concept of the dual role of intelligence does not exist within Canadian Armed Forces doctrine, and thus will be defined and explored within this paper as “Red” and “Blue” intelligence.

RED INTELLIGENCE

To cinch victory, a commander must be forewarned of events and threats. Clausewitz stated that intelligence is “every sort of information about the enemy and his country – the basis, in short, of all our plans”.⁴ It’s true that intelligence cannot win the battle alone, but it is intelligence that provides an understanding of the end state to be achieved, the identification of the vital ground and objectives to be obtained, an understanding of the strengths, weaknesses, and intent of the enemy as well as the friendly forces; in other words, all the elements towards building a plan for victory. This is the domain of Red Intelligence.

⁴ Clausewitz, *On War*, 86.

Red Intelligence is built by studying the weather, terrain, neutral, and adversary forces to include their physical disposition, orientation, capabilities, limitations, and intention in order to identify hostile deceptions and most likely courses of action.⁵ However, it is also derived by understanding the intentions, dispositions, strengths and weaknesses of friendly forces to identify vulnerabilities that a hostile actor may exploit as part of their course of action. As this study contains large amounts of data, the best methodology to display the links and vital conclusions is through a graphical model, a product that is the cornerstone of Red Intelligence, the IPOE.

IPOE is a powerful tool, and if it were to display all Red Intelligence data and conclusions, a commander would have an enhanced situational awareness to include not only hostile forces but also the forces of neutral and friendly actors in near real-time. Armed with such information, a commander could expertly manoeuvre forces to easily attain victory. However, this is not currently possible as IPOE is constricted within an operations-centric planning process.

Despite knowing the importance of the IPOE, operations and planning staffs frequently create friendly campaign plans in the absence of information on the adversary or the environment.⁶ This is attributable not to a lack of knowledge of the value of IPOE, but rather due to immense time pressures and stressful conditions operations and planning staff find themselves within. Defence Research and Development Canada (DRDC) found that “under the influence of these factors, the human capacity for reasoning and judgment can be significantly reduced.”⁷

⁵ Department of National Defence, CJOC Intelligence Handbook 2014/01 *Joint Intelligence Operations Planning* (Ottawa: DND Canada, 2014), E-11.

⁶ M. Belanger, DRDC Valcartier “The Estimate Process,” last modified March 2006, <http://cradpdf.drdc.gc.ca/PDFS/unc89/p524990.pdf>

⁷ Ibid.

Predictably, this results in a suboptimal plan based on faulty assumptions, and frequently, failure to attain mission objectives and end states.

Under an intelligence-centric planning process, IPOE would be proactive, all-encompassing in its breath and focus, and systematic in its thinking about mission success. To shift the CF OPP towards an intelligence-centric approach to planning, the following practical measures should be adopted.

Move IPOE From Stage 2&3 To A New Stage Zero Called Horizon Scanning

The CF OPP is a five-stage process, with the plurality of the intelligence activity taking place in stages 2 and 3, while troop movement and operations begin as early as stage 1. This reflects an operations-centric approach to campaign planning whereby the staff is focused more on “How to solve the problem?” before they are worried about defining “What is the problem?”. With just a cursory understanding of the crisis, operations and planning staff draft and release the Commander’s Planning Guidance and Warning Orders, both stage 1 products, putting into motion activity that could negatively shape the course of the mission and prevent mission success. The commander and staff require the IPOE to inform them of the problem, but this will not be available until stages 2 and 3 of the CF OPP. Essentially, under the operations-centric approach to planning the hands and feet of the military are moving but the mind is foggy in understanding what is the problem or what needs to get done. The result is frustration amongst support staffs as they attempt to preposition forces for an operation that is ill-defined.

In an intelligence-centric approach, a comprehensive IPOE would be ready as part of a new stage, called horizon scanning.⁸ As this new stage would occur before stage 1, intelligence staffs could lead the operations and planning staff efforts with an enhanced situational awareness of the entire problem. This, in turn, would enable Commander to release coherent and effect Commander's Planning Guidance and Warning Orders. This new approach is achievable through a practice known as horizon scanning. Horizon scanning is the process of monitoring events that may develop into problems and/or crisis some time in the future. Wars, most terrorist activity, and many natural disasters do not occur spontaneously and thus can be forecasted at least days in advance with accuracy. If operational level command intelligence staffs were involved in horizon scanning with the Strategic Joint Staff (SJS), IPOE production could commence days in advance of a CDS Initiating Directive that would warn operational commanders of a potential new mission.

Overall, by making the IPOE a stage 0 activity, it becomes proactive instead of reactive, making it a far more valuable product as the head of the military body will now be able to comprehend the problem at the earliest possible opportunity. This will enable it formulate solutions early that, in turn, will positively shape the battlespace.

For Operations Other Than Conventional Warfare Use A Systems Approach For IPOE

Currently, intelligence staffs use an analytical approach to thinking when creating an IPOE product. This approach neatly complements the operations-centric approach to planning as it quickly delivers tangible facts that an operations staff can then act against. As long as a problem is "simple" or "complicated", this approach works well. However, if the problem is

⁸ Department of National Defence, B-GJ-005-500/FP-000, *Canadian Forces Joint Publication 5.0 (CFJP 5.0)* (Ottawa: DND Canada, 2008), 1-11.

“complex”, the analytical approach fails and only a systems approach to thinking can explain how to solve the problem.

Under the operations-centric approach, an analyst will use an analytic approach to thinking about the problem by breaking down the components of a situational and/or problem into elementary elements using the PMESII model. Then by studying each element in detail, the analyst will identify unique variables that can then be generalized into principles and rules on how, when, and where an enemy force will operate.⁹ These principles and rules are then used to make predictions on possible future hostile courses of action. This approach is very efficient and produces good predictions when the situation and/or problem being observed is either a simple system or a complicated system.

A simple system is one in which there are few elements, the interaction of the elements is well defined and is not subject to change or outside influence.¹⁰ In other words, an activity that can be predicted reliably, accurately, and repeatedly. An example of a simple system is one where a restocked and refueled warship indicates an imminent departure for operations. A complicated system is one in which there are many moving parts but those parts are guided and controlled by rational experts who implement policies and delegate control to various units to achieve a common mission.¹¹ Under this system, it is still possible to make accurate predictions of future activity. An example of a complicated system would be a country’s armed forces being used to invade another. By observing its logistical patterns, communications, movements, and dispositions as well as its doctrine, all operating under a central command coordinating its

⁹ J De Rosnay, “Analytic Vs. Systems Approaches,” last modified 17 Feb 1997, <http://pespmc1.vub.ac.be/ANALSYST.html>

¹⁰ Sean Snyder, “OECD Education Working Papers No. 96 - The Simple, the Complicated, and the Complex: Educational Reform Through the Lens of Complexity Theory,” last modified 13 Dec 2013, <http://dx.doi.org/10.1787/5k3txnpt11nr-en>

¹¹ Ibid.

actions, it is possible to accurately predict the timing and location of various air, ground and naval missions the military will use to conquer the other nation. Overall, if the system being studied is not influenced by outside actors (e.g. political, or social), analysts can use the analytical approach to make accurate predictions. However, the Canadian Armed Forces rarely faces problems with simple or complicated systems. Rather, the problems being confronted are those with complex systems.

A complex system is when a problem has multiple interconnected complicated systems with no common guidance by a rational expert.¹² An example of this type of a problem would be Iraq during the post-2003. The problem encompasses an insurgency with ISIS, ethnic tensions amongst Iraqis, economic problems with production, and territorial integrity.¹³ These problems cross the diplomatic, economic, informational and military domains each with their own actors that do not answer to the guidance or control of a rational expert. A solution within one will not necessarily provide a beneficial effect in another system, yet they are all interconnected. This is a complex system.

Within this context, the analytical approach would not work. The data is imperfect due to limited intelligence collection techniques and availability and free will of multiple human actors prevent the system being under one common rational guidance. A competent intelligence analyst would find it too difficult to isolate variables to make accurate and reliable predictions of possible enemy courses of action. Any analysis would yield an inaccurate and false understanding of the enemy, thus making friendly forces susceptible to defeat.

¹² Ibid.

¹³ Sinan al-Hawat, "The Four Main Challenges for Iraq," last modified 1 Feb 2016, <https://weareiguacu.com/the-four-main-challenges-for-iraq>

The solution is to use the systems approach to analyzing complex problems. Within a systems approach, the same elementary elements are identified using the PMESII model. However, the overall intent is to understand the system in its totality vice its parts. By studying the effects of how the various complicated systems interact with each other, it is possible to identify unintuitive sub-systems within the network of systems, thus deepening the understanding of the problem.¹⁴ From this, it is possible to model the behaviour of the problem, make accurate predictions of possible future enemy courses of action, and calculate costs, risks, and benefits of attacking and/or isolating certain systems. This approach can also be successfully used to understand simple and complicated system. Another benefit is that it helps identify possible surprises while enabling the development of friendly deception operations.

A systems approach seeks to comprehensively understand the problem before attempting to find a solution, thus making it complimentary to an intelligence-centric planning process and superior to an analytical approach that enables an operations-centric planning process.

An Opposing or “Reverse” IPOE will lead to more accurate Enemy Courses of Action

Currently, IPOE is done from an operations-centric point of view as it seeks to quickly and dispassionately understand the hostile force’s disposition & orientation, strengths & weaknesses, doctrinal templates (how they fight according to their doctrine and observed practice) and the effect geography, weather, societal factors, politics and history will impose on forces in the battlespace. By only taking in the tactile elements of the battlespace, is it possible to build a good current situation, but by not taking into account the human and psychological factors, it falters when predicting the adversary’s operational design, and possible courses of

¹⁴ J De Rosnay, “Analytic Vs. Systems Approaches,” last modified 17 Feb 1997, <http://pespmc1.vub.ac.be/ANALSYST.html>

action and attack timings because it does not consider how the adversary views both the crisis and our own forces. Predictions made under this approach rarely reflect actual enemy activity. This, in turn, could place friendly forces in jeopardy due to a surprise, a deception or poor manoeuvring based on faulty intelligence.

For example, during the 1991 Gulf War, western intelligence had access to world-class reporting on the Iraqi military.¹⁵ After analyzing the Iraqi order of battle, dispositions, strengths, weaknesses, and the Iraqi way of war based on historical observations, analysis come to what they perceived as a logical conclusion: the Iraqi military was strong and would likely engage in a tenacious defence of Iraq and Kuwait.¹⁶ Yet when the Coalition army confronted the Iraqis, they found an air force that did not come out to fight and scores of Iraqi soldiers surrendering in droves. In the end, a ground campaign that was expected to have lasted months was in fact over in four days.

Had the western intelligence analysts instead assessed the Coalition's forces from the Iraqi perspective, they would have assessed that Iraq's strategy was more bravado than an actual intent to aggressively defend Kuwait. By using "Reverse" IPOE, western intelligence analysts could have constructed their opponent's perspective using what they thought was their probable ISR collection strategy.¹⁷ Under this context intelligence would have understood that Saddam and his generals believed that any army, even a modern one could not move fast in the desert due to logistical concerns.¹⁸ They would have understood that Saddam postulated that the US

¹⁵ Department of Defence, *Conduct of the Persian Gulf War: Final Report to Congress*, (Washington, D.C: US Government Printing Office, April 1992),109-111.

¹⁶ Ibid,112-113.

¹⁷ Joint Chiefs of Staff, *Joint Intelligence Preparation of the Operational Environment*, J2 2-01.3 (Washington D.C.: Joint Chiefs of Staff, 2014) I-23.

¹⁸Norman Cigar, "Iraq's strategic mindset and the gulf war: Blueprint for defeat," *Journal of Strategic Studies*, Vol.15, No1: 22.

military would not fare well as their recent combat experience in Vietnam did not match that the experience of Iraqi troops.¹⁹ Even if the US could conduct effective offensive operations, the USSR, an ally of Iraq, would act as a political counterweight as they had in previous wars in the region and the fighting between the Coalition and Iraq would halt.²⁰ Given the limited distance the army could travel, and the likely few days the war would last, there was no need to prepare for an offensive war, a defensive one with well dug in troops would suffice before the Coalition would either retreat or hostilities would end through Soviet diplomatic efforts. This is not to say that the Iraqi strategy was a good one. Rather this explains the absence of an aggressive Iraqi battle plan. The point is, Opposing or reverse IPOE would have correctly discovered the Iraqi battleplan. Knowing the enemy's battle plan is key to avoiding deception, surprise and achieving victory. In the end, it didn't matter because Saddam had miscalculated the power and effect of the US Air war, but nonetheless, the lesson regarding points of view remains valid.

BLUE INTELLIGENCE

Blue Intelligence, the second of the dual roles, is central to the success of the campaign. While Red Intelligence finds itself in the limelight providing commanders and staffs with intelligence reporting on the enemy, weather, and terrain, Blue intelligence focuses on two aspects. The first is developing and employing intelligence teams to enable the mission. This is known as the "Intelligence Architecture". The second aspect is shepherding the development of an optimal friendly plan through intelligence-led planning.

Within the operations-centric planning process, the concept of Blue Intelligence is not well known, nor well understood. Within CFJP 5.0, only two words: "Intelligence Architecture"

¹⁹ Ibid, 23.

²⁰ Ibid, 12.

appear once as a suggested appendix to the intelligence annex without any further explanation as to its possible meaning.²¹ In 2014, CJOC J2 staff published the Joint Intelligence Operations Planning Handbook with the intent of describing a joint intelligence architecture.

The CJOC Joint Intelligence Operations Planning Handbook excels in explaining the responsibilities of an intelligence planning team in developing an Intelligence architecture. It adeptly points out the challenges in devising an intelligence command and control architecture, selecting the right mix of personnel with the correct trades and skills, choosing the best-specialized intelligence equipment to support collection and the nuances of laws and policies.²² With an effective intelligence architecture in place, Red Intelligence can be created, which leads to effective forewarning, thus enabling a commander to adroitly manoeuvre his forces and attain victory. An effective intelligence architecture is vital for mission success; however, intelligence-led planning is just as critical.

In an operations-centric planning process, intelligence provides input by describing the problem, and then the operations and planning team creates the solution by offering the commander numerous course of action. As simple as this method is, it is very easy for it to fail. Routinely, decision-makers either do not listen to Red Intelligence or they pay it lip service to it as they either do not believe the assessments or they do not trust assessments because they do not understand how intelligence reporting is created.²³ In the end, the selected plan will be sub-

²¹ Department of National Defence, CFJP 5.0, 5E 1-1.

²² Department of National Defence, CJOC Intelligence Handbook 2014/01 *Joint Intelligence Operations Planning* (Ottawa: DND Canada, 2014), 13-27.

²³ Richard Betts, and Thomas Mahnken, *Paradoxes of Strategic Intelligence: Essays in Honor of Michael I. Handel*, (London: Frank Cass, 2003), .106-107. also, Erik Dahl, “Why Won’t They Listen? Comparing Receptivity Toward Intelligence at Pearl Harbor and Midway” *Intelligence and National Security*, Vol. 28, No.1 (2013): 85.

optimal as staffs will ignore the intelligence advice and prefer their own biases that may be based on either incomplete information (e.g. the absence of Red Intelligence) or faulty assumptions.

In an intelligence-led planning process, intelligence staffs rank the Intelligence Architecture as a second priority. Their primary focus is on integrating the Red Intelligence analysis into the various friendly courses of action being created by the plans and operations staff. The focus is on ensuring all aspects of possible hostile action and environmental factors have been considered in the friendly campaign plan. The goal is to avoid an intelligence failure caused by decision-makers refusing to consider the Red Intelligence analysis. The aim is not to take over leadership from the J5 planning staff, but rather to vigorously argue for a particular friendly course of action that optimizes all friendly factors while countering all factors identified in the IPOE.

This sentiment is further reflected by Clausewitz when he states “What the enemy is doing is significant only in relation to what one’s own forces are doing or planning to do. Intelligence must be supplied to a total situation.”²⁴ Unlike plans or operations staffs, intelligence staffs, through their trusted positions and security clearances, are afforded all the information regarding a campaign, be it on neutral forces, the enemy, the terrain, the weather and even the disposition and orientation of the friendly forces. Due to this situation, they are in a unique position, similar to that of the commander, where they have access to all vital information for campaign planning and can ensure its complete amalgamation into the friendly campaign plan. Unfortunately, this is not an opportunity afforded to either the operations or planning staffs. This only reflects the centrality of intelligence to the planning process, and justifies the practicality of intelligence-led planning.

²⁴ Clausewitz, *On War*, 117.

CONCLUSION

Effective forewarning includes an understanding of the problem beyond the tactical to also include the psychological and human elements of the battlespace. Forewarning permits commanders and staffs to comprehensively understand the problem. Once a commander understands the problem, he is able to effectively manoeuvre his forces to attain victory. As such, forewarning is worth more than strengths in numbers or technological superiority. To get forewarning commanders need to ensure they have access to Red Intelligence. In turn, Red Intelligence can only be made available when Blue intelligence is in place. Without the dual role of intelligence, there will be no effective warning and the CF OPP will fail. The CF OPP is a vital doctrine, but its relevance will be improved when it adopts an intelligence-centric approach to planning. Once the CF enthusiastically embraces the dual roles of intelligence in campaign planning the commander will always be best situated to achieve victory. In the end, it's about enhancing the campaign through intelligence-led planning, much like an operation is enhanced through intelligence-led operations.

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