
NOTE TO FILE—A COMPARISON OF THE INFORMATION OPERATIONS DOCTRINE OF CANADA, THE UNITED STATES, THE UNITED KINGDOM, AND NATO

Neil Chuka

Information operations (Info Ops) doctrine has probably produced more disagreement and confusion amongst the nations of the ABCA Armies' Standardization Program (American, British, Canadian, Australian, and New Zealand), academics, and the media, than any other military doctrine subject (save, perhaps, for counter-insurgency doctrine). The confusion and disagreement has run along a number of lines: that the doctrine was overly techno-centric; that key terminology was poorly defined; that the doctrine was too conceptual in nature and poorly grounded; that the doctrine was too vague to enable personnel to employ it in the field.¹ All of these criticisms have a basis of truth. However, since the publication of the first Info Ops doctrine by the United States (US) Army in 1996, great improvements have been made, and it appears that in the near future there will be a joint, international Info Ops doctrine that reconciles national lexicons, concepts, and philosophical approaches to the subject in the form of NATO Allied Joint Publication (AJP) 3.10.²

It has been a painful, lengthy process to produce AJP-3.10 though, taking many years and numerous drafts (six or seven in total by this author's count) and reflective of the type of change occurring to the Info Ops doctrine of the US Army, the Canadian Army, and in the United Kingdom (UK). In the US, the Army had made great strides in improving its Info Ops doctrine as part of a rewrite of its basic Operations manual, FM 3.0, successfully shedding the vague and techno-centric nature of earlier versions. In the UK, new conceptual thinking has led to reconsideration of the stance adopted by the Army and Joint level doctrine writers. This has caused a complete reworking of the Info Ops construct. The new conceptual stance has made it very difficult to reconcile with new allied doctrine. In Canada, the Army has new Info Ops / Influence Activities doctrine as part of recently published *Land Operations* and *Counter-insurgency Operations* manuals. The material in these manuals remains in line with the November 2007 draft version of AJP-3.10.

This article argues that although the Info Ops doctrine of the US Army, Canada, the UK, and NATO has in general improved through the absorption of lessons from operations over the past decade and stronger conceptual thinking on the subject, the topic of Info Ops continues to generate much debate and some confusion. That being said, it is possible, to a degree, to reconcile the new and emergent national doctrines and that of NATO. This article will provide a brief overview and comparison of the Info Ops doctrine of the Canadian, American, and British Armies, and NATO. It begins with an overview of the Canadian Army's new Info Ops doctrine and then compares the US Army's, the UK's, and NATO's new doctrine to it. The intent is to highlight the similarities and differences between each nation. The goal is to provide enough insight that the reader may be able to understand the doctrinal basis for Info Ops in a coalition environment.

Canada

Currently, the Canadian Forces (CF) possesses no up-to-date, joint-level Info Ops doctrine. At the joint level, some units continue to refer to the 1998 CF Info Ops manual, despite the fact that it is now several generations out of date. The Army has up-to-date Info Ops doctrine published as part of new *Land Operations*³ (Land Ops) and *Counter-insurgency Operations*⁴ (COIN) doctrine. There is no intent to publish a stand-alone Info Ops manual at the Army level. For the most part, the Army's new Info Ops doctrine closely follows the draft NATO Info Ops manual, AJP-3.10⁵. Because the Army has the only up-to-date Info Ops doctrine in Canada, its doctrine will be used as the basis of comparison throughout this note.

All Canadian Army doctrine is predicated on adherence to the philosophical constructs of the effects-based approach, comprehensive approach, manoeuvrist approach, and mission command. The effects-based approach to operations simply implies that the all tactical and operational level activities should be considered for primary, secondary, and if

possible, third-order effects so that unintended effects are minimized or avoided all together and that all activities should be linked to the desired strategic end state.⁶

The comprehensive approach implies “the deliberate use and orchestration of the full range of available capabilities and activities to realize desired effects.”⁷ This includes the full range of national capabilities, meaning the “fires” capabilities of the military element, and the “influence” capabilities of the military and civilian elements of a Canadian mission. The comprehensive approach is based upon a joint military approach, cooperation, and to the greatest extent possible, coordination with other government agencies and departments and non-governmental organizations, normally in a multinational, coalition environment. Both the effects-based approach and the comprehensive approach are viewed as philosophical constructs vice systems approaches, meaning that the concepts are simply meant to shape thinking rather than provide some type of scientific system for planning.

The manoeuvrist approach is another key philosophic construct and is most succinctly defined by capstone British doctrine:

*The manoeuvrist approach to operations applies strength against identified vulnerabilities, involving predominantly indirect ways and means of targeting the conceptual and moral component of an opponent's fighting power. Significant features are momentum, tempo and agility which, in combination, aim to achieve shock and surprise.*⁸

Manoeuvre, a term used most often by elements of the US armed forces, is the application of manoeuvrist thinking to war fighting.⁹

This approach seeks to apply friendly strengths against adversary weakness, in combination with maintenance of momentum and rapid tempo to induce shock and surprise. “It calls for an attitude of mind in which doing the unexpected and seeking originality is combined with a ruthless determination to succeed.”¹⁰ The manoeuvrist approach does not eschew physical destruction of the enemy, but seeks to achieve the desired ends of a campaign in the most effective manner possible.

Finally, mission command is defined as “the philosophy of command that promotes unity of effort, the duty and authority to act, and initiative to subordinate commanders.”¹¹ Mission command is an essential supporting element to the other philosophical constructs discussed above because it is meant to provide initiative and authority to subordinates to act, predicated on a clear understanding of both the incremental and ultimate goals of a campaign and mission and of the intent of commanders at all levels.

It should also be noted that Canadian Army doctrine recognizes only physical and psychological planes.¹² The doctrine argues that activities create effects on both of these planes, but the order of the effects and the primary desired effect will differ dependent upon context and aim. Thus, offensive fires may seek to destroy an enemy's physical capability as a first-order and primary desired effect, with secondary effects on his will to continue the fight. On the other hand, the construction of a well for fresh water and improvements in sanitation may be the first order effect of the activity, but the secondary effect, improved relations with coalition forces, is the primary desired effect. In both cases, effects were created on the physical and psychological planes, but the primary desired effects differed. The latter instance is an example of an *influence activity*.

With the understanding of these basic philosophical constructs, we can turn to the discussion of Canadian Army Info Ops doctrine.

The Army defines *information operations* as:

*Coordinated actions to create desired effects on the will, understanding, and capability of adversaries, potential adversaries and other approved parties in support of overall objectives by affecting their information, information based processes and systems while exploiting and protecting one's own.*¹³

Info Ops, as a coordinating function, is applicable across all campaign themes, from stability operations to high intensity warfare. However, the primary capabilities employed in a given campaign theme will differ, depending upon the context and operational

requirements. Army doctrine has accepted three core activity areas for Info Ops: influence activity (IA), counter-command activity (CCA), and information protection activity (IPA).¹⁴ As can be seen in Figure 1, CCA and IP activities are considered to be on the physical plane while Influence Activities are on the psychological plane.

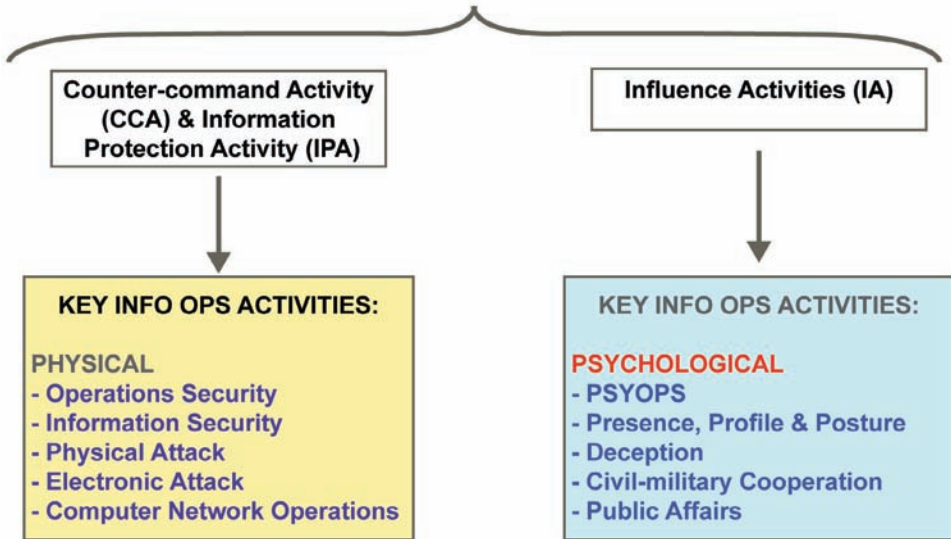


Figure 1: Canadian Army Core Activity Areas¹⁵

CCA and IPA are essentially offensive and defensive actions that seek to create first order effects on the physical plane. Simply put, CCA affects the capability of the target, IPA affects the target's understanding, and Influence Activities affect the target's will.¹⁶ IA seeks to create primary desired effects on the psychological plane, and as such, focus of Info Ops during Stability and Counter-insurgency campaigns. Since publication of the Canadian Army *Land Ops* and *COIN* manuals, some discussion has taken place about reclassifying deception, which was always only meant to reflect deception undertaken to deceive an enemy, from the "influence" category to the "counter-command" category. This would be to remove any misconception that deception activities would be conducted to deceive non-military target audiences.

The Army *COIN* manual defines IA as "an activity designed to affect the character or behaviour of a person or a group as a first order effect...it affects understanding, perceptions, and will, with the aim of affecting behaviour in a desired manner."¹⁷ The primary capabilities of the IA area are psychological operations (PSYOPS), public affairs (PA), civil-military cooperation (CIMIC), presence, posture and profile (PPP), and (military) deception. Which capabilities are employed to achieve the desired effects on the target audience will depend upon what the aims are, the context, and the target audience. Canadian doctrine and practice maintains clear distinctions between PSYOPS and PA, but holds that the activities of both must be integrated and synchronized.¹⁸

To conclude the discussion of Canadian Army Info Ops doctrine, the key elements to remember are the philosophical constructs of the effects-based approach to operations, the comprehensive approach, manoeuvrist approach, and mission command, and the division of Info Ops activities into the three core activity areas of influence activity, counter-command activity, and information protection activity. Because the intent of this note is simply to present a comparative overview, the reader should refer to the noted sections of the Army's *Land Ops* and *COIN* manuals for more detailed information.

The United States

The US has both Joint and Army Info Ops doctrine. The joint level has Joint Publication (JP) 3-13 *Information Operations* (February 2006), while the US Army does not currently

have stand-alone Info Ops doctrine. However, the Army has an updated Info Ops chapter in the newest edition of FM 3-0 *Operations*, their capstone land operations manual.¹⁹ In order to keep the length of this note brief, and because most Canadian military personnel deploying on current coalition operations will be interacting with US Army personnel, this section will primarily focus on the material contained in FM 3-0 *Operations*.

The US Army employs philosophical approaches to their doctrine similar to Canada; however, there are a few differences that require noting. While they do not use the effects-based approach terminology, they do predicate operations on the consideration of first, second, and third order effects of activities. Rather than “Comprehensive Approach” they use “Unified Action.” The US Army does not employ the term “manoeuvrist approach,” preferring to employ “manoeuvre” in a somewhat ambiguous manner that can allow for interpretation along the same lines as manoeuvrist approach. However, this ambiguity leaves extrapolation and interpretation of manoeuvre subject to the personality of the reader. Mission command is employed and defined in a manner that, for all intents and purposes, is identical to the Canadian Army.

The US Army has dropped the term “Information Operations” and now titles the doctrinal subject “Information Superiority.” There are a number of reasons why the term is no longer in use by the US Army, but the discussion of these reasons is not especially pertinent to the aim and scope of this article.

Information superiority is defined as:

*The operational advantage derived from the ability to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary's ability to do the same.*²⁰

One of the major criticisms of earlier generations of US Army and Joint Info Ops doctrine was that the term Information Operations was so broad as to be largely meaningless, and that the description of what capabilities and activities required coordination was confusing, the US Army developed the concept of “Information Tasks” that seek to group activities (or intended effects) and capabilities into broad categories (Figure 2). The intent is to “integrate information tasks into all operations and include them in the operations [planning] process from inception.”²¹ In essence, the categorization of activities is meant to make it easier for commanders and personnel to conceive of how to match desired ends with operational activities and the intended effects required to achieve the goal of a mission. In this, the development of the five information tasks is no different than the categorization of activities in the Canadian Army doctrine.

Task	Intended Effects	Command and Control	Information Protection	Operations Security	Military Deception
Intended Effects	Inform and educated internal and external audiences Influence the behaviour of target audiences	Degrade, disrupt, destroy, and exploit enemy command and control	Protect vital intelligence on friendly forces to hostile collection	Deny vital intelligence on friendly forces to hostile collection	Confuse enemy decision makers
Capabilities	Leader and soldier engagement Public Affairs Psychological operations Combat camera Strategic communication and Defence support to public diplomacy	Physical attack Electronic attack Electronic warfare support Computer network attack Computer network exploitation	Information assurance Computer network defence Electronic protection	Operations security Physical Security Counter-intelligence	Military deception

Figure 2: US Army Information Tasks²²

As can be seen from Figure 2, the five groupings of “Information Tasks” are information engagement, command and control warfare, information protection, operations security, and military deception. The five groupings can be roughly aligned with the three core activity areas in Canadian Info Ops doctrine (Figure 3). Command and control warfare and military deception is roughly equivalent to counter-command activity; information protection and operations security (OPSEC), combined, is roughly equivalent to information protection activity; while information engagement is roughly equivalent to influence activity.

CDN Army Activity Group		US Army Equivalent
Influence activity	=	Information engagement
Counter-command activity	=	Command and control warfare and military deception
Information protection activity	=	Operations security, and information protection

Figure 3: Canadian Army and US Army Activity Categorization Equivalencies

Information engagement is defined as:

*The integrated employment of public affairs to inform U.S. and friendly audiences; psychological operations, combat camera, U.S. Government strategic communication and defense support to public diplomacy, and other means necessary to influence foreign audiences; and, leader, and Soldier engagements to support both efforts.*²³

While the wording of the definition for information engagement is dissimilar to Canada’s definition of influence activity, the intent is essentially the same: *to affect the behaviour of the target audience so that a desired or preferred course of behaviour is adopted*. The only exception to this rule is with the role of PA, which, although it undeniably influences audiences by the ways and means in which information is presented, there is no primary intent to influence the behaviour of an audience. Rather, the intent is to inform.

The exclusion of military deception from information engagement, the specification that PA is meant to influence domestic audiences alone, and that PSYOPS is meant to solely influence foreign audiences is made to satisfy US legal restrictions codified in law. Although in practice Canada follows the same idea, there are no codified legal restrictions in Canadian statutes. Also, “Leader and Soldier engagement” is roughly equivalent to “Presence, Posture, Profile” in Canadian doctrine.

Finally, Canadian personnel involved in coalition operations with the US may hear the term “Information Environment.” Defined by the joint level as “the aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information,”²⁴ the US Department of Defense considers the information environment as an operational plane along with psychological and physical. Because of the ambiguity and lack of consensus amongst doctrinal communities on the definition of the term, neither the US nor Canadian armies continue to employ it, although the US joint level and the US Air Force does. That, plus the length of time it has been in use (over twelve years), means that personnel are likely to encounter the term on coalition operations. In Canadian doctrine, the elements of the information environment are subsumed in either the physical or psychological planes.

The current construct of US Army Information Superiority doctrine is much more compatible with new Canadian Army doctrine than previous iterations. Although much of the terminology differs, the intent is the same, and it is fairly easy to reconcile the US lexicon with that employed in new Canadian doctrine. Readers are encouraged to refer to Chapter 7 of the newest edition (2008) of FM 3-0 for more detail.

The United Kingdom

The UK’s Info Ops doctrine is currently being re-written. Previous UK joint doctrine, Joint Warfare Publication (JWP) 3-80 *Information Operations* (June 2002),²⁵ was used to inform the creation of both NATO AJP-3.10 and Canadian Army doctrine. JWP 3-80 introduced

the activity categories eventually promulgated in NATO AJP-3.10 and in Canadian doctrine. Indeed, the fundamentals of JWP 3-80 were also used in ABCA Information Operations syndicates. However, sometime during the end of 2007 and the Spring of 2008, the UK scrapped the concepts put forth in JWP 3-80 and set about to rewrite the military's Info Ops doctrine. While the reasons for this are beyond the scope of this article, it is important to note that the new concepts being used to rewrite the doctrine are a complete break from the previous version, and are somewhat difficult to reconcile with either US, Canadian, or NATO material.

Despite the proposed changes to UK Info Ops doctrine, the philosophical foundations of UK doctrine remain unchanged and are identical to those employed by the Canadian Army. Thus, the effects-based approach, manoeuvrist approach, comprehensive approach, and mission command are employed in an identical manner as in Canadian doctrine.²⁶

Info Ops doctrine, however, is a completely different matter. Information on how the UK plans to reorganize the Information Operations construct is limited at this point although it appears that it will employ the structure below:

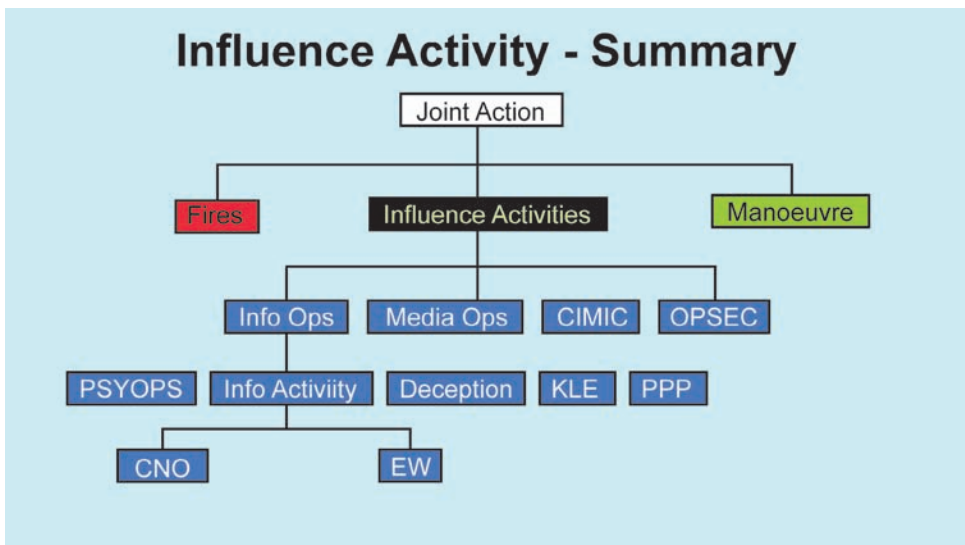


Figure 4: Proposed UK Reorganization of Information Operations Doctrine. Abbreviations: Info = information; CIMIC = civil-military cooperation; OPSEC = operations security; PSYOPS = psychological operations; KLE = key leader engagement; PPP = presence, posture and profile; CNO = computer network operations; and EW = electronic warfare.

As can be seen from Figure 4, taken from a presentation to the ABCA Agile Alliance Influence Activities Syndicate in Shrivenham in June 2008, “Joint Action,” defined as “the deliberate use and orchestration of the full range of available military capabilities and activities to realise effects,”²⁷ is the overarching military construct. Joint action sits below the concept of “Comprehensive Approach.” “Fires” and “Manoeuvre” straddle “Influence Activities” as supporting activities. “Manoeuvre” is defined as “coordinated activity necessary to gain advantage within a situation in time and space”²⁸ and therefore remains the application of manoeuvrist thinking to war fighting. “Fires,” defined as “the deliberate use of physical means to support the realisation of, primarily, physical effects,”²⁹ in essence remains the use of ordnance to influence enemy thinking (i.e. demonstration fires) or degrade his capabilities. The term “Influence Activities” is defined as “the capability, or perceived capacity to affect the character or behaviour of someone or something.”³⁰ It is this last definition that constitutes the major change to UK doctrinal thinking. Thus, the key change is one of terminology and organization that breaks from the previous categorization of activities in JWP 3-80.

Influence activities sits in a position formerly occupied by Info Ops. Info Ops now comprises the purely military activities of PSYOPS, “Info Activity” (equivalent to counter-command activity), deception, key leader engagement (KLE), and presence, posture, and profile (PPP). This new construct thus excludes media ops (PA equivalent), CIMIC, and OPSEC, all of which are arrayed as supporting capabilities alongside Info Ops. The division of capabilities in this manner isolates Info Ops to solely those things that will be used by the military against a military opponent (state-based or irregular), and provides for an organizational separation for CIMIC and media ops, which are capabilities that, in the case of media ops, are not intended to influence as a first-order effect, and CIMIC, which can be used to assist neutral and friendly parties. Essentially, whereas Canadian doctrine sees influence activities as part of Info Ops writ large, the UK is replacing what Canada calls Info Ops with “Influence Activities” and places greater emphasis on media ops, CIMIC, and OPSEC as enablers rather than activities under the Info Ops rubric.

All this being said, Figure 4 is conceptual in nature and not published doctrine. Until formally published, it will prove difficult to properly reconcile their new construct with allied doctrines. However, information suggests that this construct has already been employed operationally by the British military.

NATO

NATO Info Ops doctrine has been many years in development and it appears it is finally approaching ratification. The most current version is entitled Allied Joint Publication 3.10 (AJP-3.10) *Allied Joint Doctrine for Information Operations*, Ratification Draft 1, and dates from late 2008.³¹

Reflective of the amount of variance in the Info Ops / Influence Activities doctrine of Canada, the US, and the UK discussed above, the AJP 3.10 draft has changed from the relatively straight-forward definition and categorization of activities that were adopted for Canadian doctrine to something less definitive and lengthier. AJP-3.10 now has two related definitions, one for Info Ops, and the other for “Information Activities.” Info Ops are now defined as:

*A military function to provide advice and coordination of military information activities in order to create desired effects on the will, understanding and capability of adversaries and other NAC [North Atlantic Council] approved parties in support of Alliance mission objectives.*³²

“Information Activities” are now defined as “actions designed to affect information and information systems. They can be performed by any actor and include protective measures.”³³

Information activities are purely military activities with PA as a supporting capability under Info Ops. Conceptually, this is not at odds with the statutory or policy limitations guiding the use of PA (or media ops) in the US, UK, or Canada. Combined, the NATO definitions of Info Ops and information activities are essentially equivalent to the Canadian Army definition for Info Ops and do not present any conceptual difficulties for reconciling the different doctrines.

The other difference of this latest version of AJP-3.10 from Canadian Army doctrine is that the category titles of Influence Activities, Information Protection Activities, and Counter-command Activities have been removed, although the definitions remain very close to those used in the Canadian Army manuals for those categories. Although not named (the Canadian title is in brackets), the NATO definitions for influence activities, information protection activities, and counter-command activities, in order, are:³⁴

- Influence Activities—Information activities that focus on changing, influencing, or reinforcing perceptions and attitudes of adversaries and other NAC approved parties.
- Information Protection Activities—Information activities that focus on preserv-

ing and protecting Alliance freedom of manoeuvre in the information environment by defending the data and information that supports Alliance decision-makers and decision-making process.

- Counter-command Activities—Information activities that focus on countering command functions and capabilities by affecting the data and information that supports adversaries and other NAC approved parties, and are used in command and control, intelligence, surveillance and target acquisition, and weapon systems.

All other components of AJP-3.10 are identical with the basic features of US, UK, and Canadian doctrine. The philosophical basis for the doctrine is closely related to those of Canada, the US, and UK. Also, the key capabilities and tools that comprise the Info Ops concept include PSYOPS, PPP, OPSEC, information security, military deception, EW, physical destruction, KLE, CNO, and CIMIC.³⁵ PA is, as noted above, a separate but related function that must be coordinated at all times with alliance Info Ops.³⁶

Conclusion

Despite different terminology and organization, broad, mutual understanding of Info Ops and influence activities concepts exists between the NATO, the US, UK, and Canadian armies. Differences in terminology, lexicon, and organization exist, but careful reading of the relevant doctrine, which must include, in some cases, higher level capstone doctrine, can help avoid potential misunderstandings or confusion. The basic common understanding between the allies is that Info Ops and influence activities are command-driven, that they are a coordinating function, and that they are essential to operations in the contemporary operating environment. That being said, there will continue to be some confusion and disagreement as the doctrine continues to change. This must be expected given the fact that the UK's new conceptual stance is not published doctrine and the fact that none of the doctrine compared here is identical. Variations in lexicon, conceptual thinking, and policy, sometimes even within the various levels of a nation's armed forces, means that it will likely be many more years before general consonance in national approaches to the Info Ops doctrinal construct is achieved.

The goal of this brief comparative note has been to provide enough insight that the reader may be able to understand the doctrinal basis for operations in a coalition environment by highlighting the similarities and differences between the Army Info Ops doctrine of Canada, the US, UK and NATO. It is therefore a limited discussion. For a deeper understanding, this note can be used to guide the reader through a closer reading of the material referenced herein.

About the Author ...

Neil Chuka is a Defence Scientist—Strategic Analyst with Defence Research and Development Canada, Centre for Operational Research and Analysis. Prior to being hired by DRDC CORA, he worked as a contractor at the Directorate of Army Doctrine on land operations, counter-insurgency and information operations doctrine. His Master's thesis is a comparative analysis of ABCA-nation Information Operations doctrine.

Endnotes

1. A full discussion of these criticisms is beyond the scope of this article. For a comprehensive discussion of the historiography of Info Ops doctrine and the criticisms levied by various commentators, see the author's "Confusion and Disagreement: the Information Operations Doctrine of the United States, The United Kingdom, Australia, Canada, and NATO," unpublished Master's Thesis, Kingston: Royal Military College of Canada, October 2007. In particular, Chapters One and Two. A portable document format (PDF) version is available upon request to the author.
2. Some of the information presented in this article is a result of the author's involvement in the

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- development of Canadian Army doctrine and ABCA project teams and working groups, first as a contractor and now as a Defence Scientist - Strategic Analyst with Defence Research and Development Canada Centre for Operational Research and Analysis. All the information presented is unclassified.
3. Canadian Department of National Defence, B-GL-300-001/FP-000 *Land Operations* (Kingston: Army Publishing Office, 2008). See Chapter 5, Section 9. Hereafter, referred to as "Land Ops."
 4. Canadian Department of National Defence, B-GL-323-004/FP-003 *Counter-insurgency Operations* (Kingston: Army Publishing Office, 2009). See Chapter 8. Hereafter, referred to as "COIN."
 5. NATO Allied Joint Publication (AJP) 3.10 *Allied Joint Doctrine for Information Operations*, is now in the final stages of the ratification process.
 6. *Land Ops*, Chapter 5, Section 4, 5-21.
 7. *Land Ops*, Chapter 1, 1-12.
 8. United Kingdom Ministry of Defence, Joint Warfare Publication 0-01 *British Defence Doctrine*, 3rd ed., (Shrivenham: Joint Doctrine and Concepts Centre, August 2008), 5-7.
 9. United Kingdom Ministry of Defence, Joint Warfare Publication 0-01 *British Defence Doctrine*, 2nd ed., (Shrivenham: Joint Doctrine and Concepts Centre, October 2001), 3-5. See also *Land Ops*, Chapter 5, Section 10.
 10. *British Defence Doctrine* (2008), 5-7.
 11. *Land Ops*, Chapter 5, Section 11, 5-84.
 12. The psychological plane has in the past been termed the "moral" plane. The change in terminology was spurred by the desire to address definitional confusion and came as a result of widespread consultation with various parties, including Defence Scientists from Defence Research and Development Canada's Toronto laboratory, specifically Dr. Carol McCann and Dr. Keith Stewart.
 13. *Land Ops*, 5-47. This definition was adapted from the November 2007 draft of NATO AJP-3.10.
 14. *Land Ops*, 5-48.
 15. Adapted from *Land Ops*, 5-55, Figure 5-14.
 16. This is not meant to say that activities in all of the activity areas may not also affect one of the other elements of the target's abilities. In general though, the first order effects are in line with the manner illustrated.
 17. *COIN*, 8-1.
 18. *COIN*, 8-2.
 19. US Department of the Army, FM 3-0 *Operations* (Washington, DC: US Department of Defense, February 2008).
 20. FM 3-0 *Operations* (2008), 7-1.
 21. *Ibid.*, 7-2.
 22. Adapted from FM 3-0 *Operations* (2008), 7-3, Table 7-1.
 23. *Ibid.*
 24. US Department of Defense, *Joint Publication 3-13 Information Operations* (Washington DC: US Department of Defense, February 2006), I-1.
 25. United Kingdom Ministry of Defence, Joint Warfare Publication 3-80 *Information Operations* (Shrivenham: Joint Doctrine and Concepts Centre, June 2002).
 26. *British Defence Doctrine* (August 2008), 1-8 to 1-10, 4-11, 5-3, 5-7.
 27. UK Ministry of Defence, Joint Discussion Note 1/07, *Joint Action* (Shrivenham: Development, Concepts and Doctrine Centre, February 2007), 1.
 28. *British Defence Doctrine* (August 2008), 5-6, fn. 4.
 29. *Ibid.*, fn. 2.
 30. *Ibid.*, fn. 3.
 31. NATO, AJP-3.10 *Allied Joint Doctrine for Information Operations*, Ratification Draft 1, (Brussels: NATO, 2008).
 32. AJP-3.10 Ratification Draft 1, 1-3. North Atlantic Council (NAC) approved parties are defined as "those identified in top-level political guidance on Alliance information activities. These may include adversaries, potential adversaries, decision-makers, cultural groups, elements of the international community and others who may be informed by Alliance information activities."
 33. *Ibid.*
 34. AJP-3.10 Ratification Draft 1, 1-7.
 35. *Ibid.*, 1-8 to 1-12.
 36. *Ibid.*, 1-13.