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HEALTH SUPPORT SERVICES: REDEFINING ITS ROLE IN HUMANITARIAN AID AND DISASTER RELIEF OPERATIONS AGILITY, FOCUS, AND CONVERGENCE

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**HEALTH SUPPORT SERVICES: REDEFINING ITS ROLE IN
HUMANITARIAN AID AND DISASTER RELIEF OPERATIONS**
Agility, Focus, and Convergence

By /par
Major Richard Deschambault

Abstract

The world is a complex and demanding environment, where conflicts and dramatic situations seem to occur more quickly and more repetitively than before. The Government of Canada takes an active part in humanitarian interventions, especially for disaster relief. Interventions have taken several forms; yet one of the most popular seems to be the delivery of aid when a disaster struck. Canada responds to appeals for aid based on its international policy, and uses a comprehensive approach to coordinate its efforts: the Whole of Government approach. On several occasions over the last twenty years, CF members were part of these efforts. The last iteration of military humanitarian deployment was in 2010, where Canada sent a Joint Task Force to deliver aid after that a devastating earthquake struck in Haiti.

The CF Health Services were part of this effort. When Health Services units deploy on operations they are traditionally employed as Combat Support units in a classic sense. HSS units are generally put under the logistics Command's umbrella, with little flexibility afforded. Yet when in a relief effort, the medical issues of dealing with civilians become their primary missions. They become an enabler and key front-line actor for the successful completion of the mission.

This paper investigates the conditions which would demand, or allow, the Health Services units to serve as manoeuvre units on disaster relief operations (DRO). This paper will argue that to effectively be employed during humanitarian assistance missions, the CF Health Services units deployed must be allocated the same rights as a manoeuvre unit.

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Chapter 1: Introduction

Background

The World is a complex and demanding environment, where conflicts and dramatic situations seem to occur more quickly and more repetitively than before. One aspect which seems to be constant is that will for advantaged societies and nations such as Canada and the United States to intervene. Some of these interventions motivated by national interests; some others are purely for humanitarian reasons.

Significant changes in the types, concepts and motivations for interventions have occurred within the last two centuries. Since the end of the Cold War and the acceleration of the effects of globalization, the Westphalian concept of nations and national identity receded in favor of a more liberal vision of the world.[1] Interventions in countries were conflict reign, where populations suffer and where the State is weak or failing, have taken new features. In the domain of humanitarian intervention, new actors, not bind by ties to nation-states have emerged.

At the same time, nations have made significant strides in developing the willingness to intervene for humanitarian reasons. Yet they have found through various experiences that an intervention must be approached in a comprehensive manner. Modern society developed a much more organized and comprehensive response to disasters; in this evolution, the governments came to play an increasing role." [2]

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[1] Alex J. Bellamy, Paul Williams and Stuart Griffin, *Understanding Peacekeeping*, 2nd ed. (Cambridge: Polity Press, 2004), 325.

[2] Gaines M. Foster, *The Demands of Humanity: Army Medical Disaster Relief* (Washington: Center of Military history, United States Army, 1983), 188.

Canadians have demonstrated time and again their will to intervene on the international level. Firm supporters of the United Nations, Canadians relish at the idea of sending aid to less favored countries. The Government of Canada has taken an active part in humanitarian interventions, especially for disaster relief. Interventions have taken several forms; yet one of the most popular seems to be the delivery of aid when a disaster has struck. Canada responds to appeals for aid based on its international policy, and uses a comprehensive approach to coordinate its efforts. It is called the Whole of Government approach. At several occasions over the last twenty years, CF members were part of these efforts. The last iteration of military aid deployment was in 2010, where Canada sent a Joint Task Force to deliver aid after that a devastating earthquake struck in Haiti.

The CF Health Services were part of this effort. When Health Services units deploy on operations they are traditionally employed as Combat Support units in a classic sense. HSS units are generally put under the logistics Command's umbrella, with little flexibility afforded. Yet when in a relief effort, the medical issues of dealing with civilians become their primary missions. As with the logistics units, they become a key enabler to the successful completion of the mission. Their employment as enablers during disaster relief efforts has however not been fully investigated. Employment of HS units during OPERATION HESTIA and similar operations has shown that there exists certain situations where Health Services units may play a critical role, perhaps even as a manoeuvre unit would do so on the battlefield.

The CF Health Services (HSS) doctrine is dated and needs to be realigned with today's realities. Unfortunately, the Field Force Review initiative which started in 2005 has been put on hold due to the demands on the HSS during OPERATION ATHENA

(Afghanistan). In the meantime, HSS supported several deployments of Humanitarian Operations with the DART, culminating with OPERATION HESTIA, the support to Haiti in 2010.

Further, the Lessons Identified (LI) during the initial After Action Reviews (AAR) of OPERATION ATHENA rotations and OPERATION HESTIA (Support to Humanitarian mission in Haiti) showed the need to reinvigorate the Field Force Review initiative. Further, in light of the success of HSS units during OP HESTIA, the Minister of Defense has requested the CF to study the possibility of establishing a plan of action which would see the HSS units being deployed as a ‗Flagship' during Humanitarian Aids operations. In his most current campaign plan, the Commander of the Canadian Forces Health Services Group is committed to man, equip, structure and train his personnel to be fully capable of supporting the core goals of the Canadian Forces at home as well as abroad and to establish a formal project to manage the re-orientation of the CF H Svcs Gp. [3]

This paper investigates the conditions which would demand, or allow, the Health Services units to serve as manoeuvre units on operations. . While very little research has been done on the contribution of military medical units in case of support to disaster relief operations, over the last several Canadian deployments, the HSS units were perceived as not performing in an optimum manner. Much had to do with an inability to coordinate medical relief with the civilian agencies and actors on the ground. In the concept of the Whole of Government approach, integration was not accomplished. So if one of the lines of operations *is* medical relief, would treating the medical unit as a

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[3] Canadian Forces Health Services Group, *Canadian Forces Health Services Group Surgeon General's Report : Campaign Plan for the Canadian Forces Health Services Group* , 2010), 1-56.

manoeuvre element help in maintaining a certain foreign policy posture, and facilitate building a collaborative environment, where civilian and military actors alike could pursue a positive outcome?

This paper will argue that to effectively be employed during humanitarian assistance missions, the CF Health Services units deployed must be allocated the same rights as a manoeuvre unit.

Precious little Information on this approach is minimal; however, the United Kingdom does, on occasion, employ their HSS units in a somewhat similar role (OPERATION NEEDLE, in Africa). Therefore, the method will be an analysis of texts, governmental and non-governmental documents, to find trends that could explain why interaction with the civilian agents is not happening, and how to improve this interaction.

The thesis will be tested by using the Command and Control (C2) model of interaction developed by Alberts and Hayes. The model will be to define the conditions needed to adapt to a complex environment, and how the C2 structure can be improved. The analysis of the concept and principles of Mission Command will demonstrate the ability of the model to serve as a tool for analysis. Within this model, HSS unit can be employed efficiently in the current CF doctrine if the command structure accepts to allocate the same rights (decision, interactions and information) to the HSS unit as they would to a manoeuvre unit.

Organization of the Thesis

The thesis will be separated in six chapters. After the usual introduction, the second chapter aims to determine the framework of humanitarian aid operations. It examines how, during humanitarian aid operations, the coordination and cooperation between the actors is critical. Finally it considers the evolution of the Canadian interventions and identifies the challenges specific to HSS units when faced with a disaster relief operation.

The third chapter aims to define the Canadian approach to response to disasters and to analyze the Whole of Government (WoG) concept and its incidence on the Canadian Forces' employment during disaster. This aims to define which issues directly affect the ability to operate in the WoG environment during Humanitarian Operations (HO). Finally, the analysis of the HSS doctrine during operations will provide a refinement of those issues identified in chapter two. The fourth chapter aims to define the gap in the WoG, and to elaborate a model that will allow the successful integration of the HSS units in disaster reliefs operations. This model will be tested by using the concepts of Mission Command.

The fifth chapter will synthesize the issues related to the C2 model of interaction, the WoG approach and the difficulties with employing the HSS in a manoeuvre concept. It aims to present propositions to further research and tests. The conclusion will synthesize the propositions into recommendations to the betterment of the HSS units' response in disaster relief operations, which will lead to a better way to coordinate with it civilian counterparts, thus improving the changes of the comprehensive approach to work.

Definition of Manoeuvre unit

Before continuing to the analysis, it is necessary to define what a manoeuvre unit is. Curiously, there are few definitions of this term; it is indeed often employed in the literature, but not really defined. So it is necessary to propose what this paper understands manoeuvre unit (or element) to be. The Cambridge dictionary online defines manoeuvre as a ―planned and controlled movement or operation by the armed forces for training purposes and in war." [4] This definition, however, is too general for the purpose of this paper.

NATO defines manoeuvre as ―the employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage in respect to the enemy in order to accomplish the mission."[5] This definition is close to what units considered as being manoeuvre do. However, it is far too focused on the kinetic actions taken against an enemy; so it does not correlate to the activities that military units undertake during HOs. But to refine this definition, it is necessary to look into the Canadian doctrine. The CF doctrine states that to define the synchronization of effects on the battlefield, five operational functions are employed. One of them is the Act function, which is explained as the ―integration of manoeuvre, firepower and offensive information to achieve a desired effect and end-state through the synchronized

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[4] "Cambridge Dictionary Online," http://dictionary.cambridge.org/dictionary/british/manoeuvre_2 (accessed 5/5, 2011).
[5] *AAP-6 (2010) NATO Glossary of Terms and Definitions*NATO Standardization Agency, 2010), 451.

application of the entire array of available capabilities, both lethal and non-lethal."[6] Yet in a disaster relief and WoG context, it does not really explain how this would work. So this thesis will define manoeuvre units as: *a unit which is capable to plan and control movement or operation to achieve a desired effect and end-state through the synchronized application of the entire array of available capabilities.* In this sense, in a WoG approach, manoeuvre units during HOs will act directly with the other actors to provide the desired effect, while it would be supported by the other military components or capabilities (such as logistic units). It becomes, in military terminology, as *supported unit*.

Chapter 2: Humanitarian Aid and Disaster relief: a background

This chapter determines the framework of humanitarian aid operations. It will present and analyzes the interaction between the disaster relief efforts participants, particularly the aid agencies such as Non-Governmental Organizations (NGOs) and the military forces. It considers the broad issues in employing military forces in disaster relief operations then examines how, during humanitarian aid operations, the coordination and cooperation between the actors can be more efficiently achieved. Finally it considers the evolution of the Canadian interventions and identifies the challenges that are faced in trying to elaborate the successful provision of humanitarian aid in a timely and effective manner.

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[6] Canada. Department of National Defence, *The Force Employment Concept for the Army - One Army, One Team, One Vision (2005)* (Ottawa: DND, 2005), 45.

Peace Support Operations (PSO)

Most of the literature on Peace Support Operations agrees the crises disturbing the international security can occur anywhere in the world. For example, the political and economic stability of one region will affect the _wider' security interests of the rest of the world. Therefore, international military involvement in crisis is not a new phenomenon. Thus, interventions such as Peace Support Operations (PSO), counter-terrorism and low or medium intensity conflicts with or without the United Nations' (UN) assent are common. [7] However, whilst disaster relief operations and humanitarian assistance missions involving military occurred as well in the past,[8] those were normally restricted to regional agents. [9]

The end of the Cold War did not bring in the _Peace Dividend' initially hoped for. Indeed, the 90's marked an augmentation of operations, under the UN auspice or not, that aimed to relieve human suffering. Albeit the focus of this paper is not on PSO, it is essential to describe the concepts of PSO to facilitate identifying the legitimacy of an intervention for humanitarian reasons, even in the case of disaster relief operations.

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[7] Kobi Michael and David Kellen and Eyal Ben-Ari, *The Transformation of the World of War and Peace Support Operations*, ed. Michael Kobi, david Kellen and Eyl Ben-Ari (Wesport Connecticut: Praeger Security International, 2009), p 53, 65

[8] Leon Gordenker and Thomas G. Weiss, eds., *Soldiers, Peacekeepers and Disasters* (New York: St Marin's Press, 1991), 118.

[9] *The Effectiveness of Foreign Military Assets in Natural Disaster Response* (Sweden: Stockholm International Peace Research Institute,[2008]).p.12A. Özerdem, "The 'Responsibility to Protect' in Natural Disasters: Another Excuse for Interventionism? Nargis Cyclone, Myanmar," *Conflict, Security & Development : CSD* 10, no. 5 (Dec, 2010), 693, http://proquest.umi.com/pqdweb?did=2188636961&Fmt=7&clientId=1711&RQT=309&VName=PQD.

Peace Support Operations and Humanitarian aid operations

Teson proposes that, the UN Charter[10], in Article 2 (4) refrains UN members from the threat or the use of force against ̶the integrity or political independence of any state", human rights and democracy are no longer the exclusive jurisdiction of the states.[11] In this context, the UN interventions have changed drastically; instead of monitoring a static, quiet cease-fire line, peacekeeping operations require interventions from the UN agents, involving, if necessary, the use of force.[12] This presupposes that peacekeepers may receive missions which were normally left to other agents, generally civilian groups: for example, distribution of humanitarian aid, rebuilding of damaged infrastructure, provision of medical care. These activities can be further complicated by the level of security related to a non-permissive environment. In the case of a mission where one or several groups of adversaries may oppose to the UN peacekeepers presence or activities, they may be engaged in combat in self-defense or in protection of the population.[13] This transforms the operations to more than just peacekeeping. Figure 1 below gives an indication of the spectrum of operations covered by the UN.

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[10] (UN *Guidelines on the use of Military and Civil Defence Assets to Support United Nations Humanitarian Activities in Complex Emergencies,* United Nations, 2006).

[11] Fernando R. Teson, *Humanitarian Intervention: An Inquiry into Law and Morality*, 3 rd ed. (Ardsley: Transnational Publishers, 2005), P. 186

[12] Ibid. P. 187

[13] Bellamy, Williams and Griffin, *Understanding Peacekeeping*, 325. (Lisa Witzig Davidson and and others, "Humanitarian and Peace Operations: NGOs and the Military in the Interagency Process" (Washington, National Defence University, 18-19 April 1996, 1996).

UN CHARTER COVERAGE
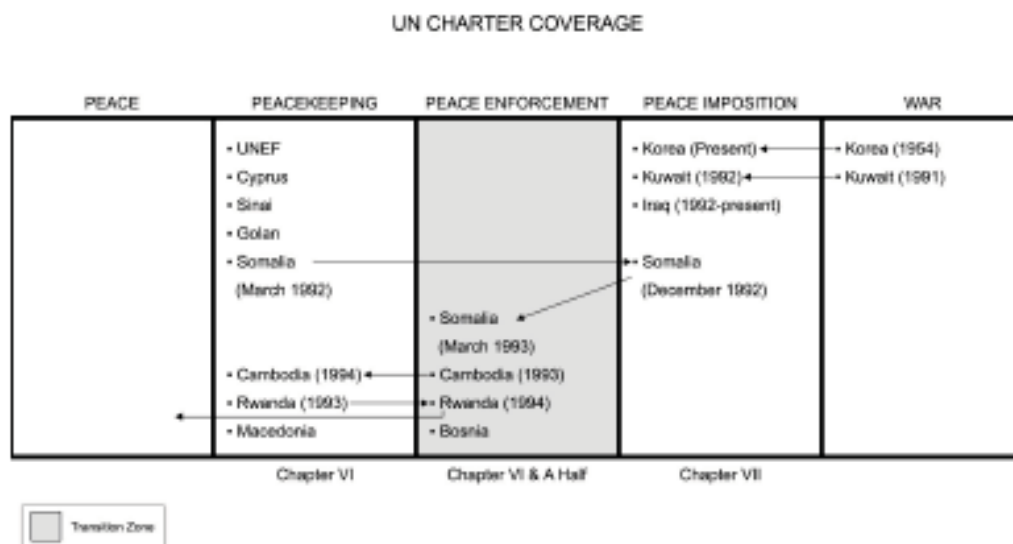
The complexity of these missions is that their nature is as political as military. Further, their success is based on the requirement for the military to collaborate with a variety of agents or institutions such as foreign governments, international organizations, non-government organizations and local political forces. Further to this, military units deployed in this theatre will need to coordinate in-theatre activities with their own government agencies and other foreign military forces. The degree of autonomy will vary greatly from one type of mission to another, which will compound the coordination issues. Thus, designing an appropriate set of command arrangements requires a clear ―understanding of the essential functions to be performed" [15] and the level of autonomy afforded in the area of coordination with other agents.

Because of the issues pertaining to taxonomy of the missions, identifying the difference between humanitarian aid and disaster relief operations allows a better

[14] Alberts David S., and Richard E. Hayes, *Command Arrangements for Peace Operations* CCPR, May 1995), http://www.dodccrp.org/files/Alberts_Arrangements.pdf (accessed December 2010). P. 19
[15] Ibid.

understanding of their context, and actions of operations. The distinction is found normally in the degree of preparedness and response time involved, as well as the level of permissiveness allowed to the actors.[16] However, the level of insecurity is normally very high. Indeed, crises are seldom declared overnight. Examples from the Kosovo crisis, East Timor, the pro-democratic movement in the Arab countries or Rwanda, have all been brewing for several years, if not decades. Those crises are also bearing the witness of a high level of violence, rarely found in the case of disasters. However, those crises are normally monitored by the aid agencies in ―an attempt to give themselves time to prepare and alert the remainder of the international community if a catastrophe is about to happen."[17]

In a hostile environment, however, or in rapidly developing circumstances, host nation resources may be destroyed or overwhelmed, and NGOs may be unable or unwilling to operate. Where they do have capacity, ethical constraints may deter NGOs from close co-operation for military ends. In such conditions, during the early stages of the crisis, military medical services may be the sole capability available to offer support. Once the initial effect has been achieved, careful consideration must be given to formulate an effective transition toward civilian aid.

On the other hand, natural disasters such as those witnesses in the Indian Ocean, Haiti, Japan and Pakistan strike with little warning. They rely more on the capacities

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[16] Larry Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, Center for Technology and National Security Policy National Defense University ed. (Washington: National Defense University Center for Technology and National Security, June 2006), 157.P.23

[17] United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), *Guidelines on the use of Military and Civil Defence Assets to Support United Nations Humanitarian Activities in Complex Emergencies*, March 2003 - Revision I, January 2006), 1-21.

readily available within the region[18] of the disaster zone to hang on until the international aid community can mobilize and come to the rescue. While progress is noted, this process takes time. As military forces are often available and perceived as a pool of prepared, disciplined and available source of assistance,[19] their employment is reasonable.

The NATO Joint Analysis and Lessons Learned Centre (JALLC) report of July 2010 indeed noted that ̶there is a clear trend for increasing the use of military capabilities in the humanitarian domain." [20] But it also noted the ambiguity pertaining to the military intervention in humanitarian aid operations, its legitimacy and effectiveness. While the report supports the notion of a military role in HOs, it must be as a complementary contributor to humanitarian aid operations. In this role, military units deployed must understand how their actions will affect the environment. The consequences of good intentions poorly executed for the lack of having a wider perception of the direct socio-cultural effects on the population it was intended to help can be catastrophic. The report cautions against underestimating the impact of well intended support to civilians.[21] This will be explored further in the thesis.

Disasters and responses: concepts and trends

At this point, for the purpose of clarity, it becomes necessary to address the taxonomy of crises and their responses. Wentz defined three separate missions which are

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[18] United Nations International Strategy for Disaster Reduction, "Disaster Statistics: Occurence: Trends-Century," ISDR, http://www.unisdr.org/disaster-statistics/occurrence-trends-century.htm (accessed February/4, 2011).
[19] Peter J. Hoffman and Thomas G. Weiss, *Swords & Salve: Confronting New Wars and Humanitarian Crises* (Laham: Rowman & Littlefield Publishers, Inc., 2006), P. 58.
[20] NATO's Joint Analysis and Lessons Learned Centre, *Medical Civil-Military Interaction* JALLC Report JALLC/CG/10/152 16 July,[2010]). P.1
[21] Ibid. P. iii

broadly accepted within the academia. *Complex emergencies* are broadly scoped humanitarian crises developing from the progressive impacts of political and military conflicts, as well as systemic problems such as pre-existing poverty. *Stabilization and reconstruction* efforts are often part of peacekeeping operations. They aim to steady and regenerate political and economic development as consequences of a conflict. Finally, *humanitarian assistance and disaster relief* operations are the result of natural or man-made disasters, such as hurricanes, earthquakes, or large-scale industrial accidents.[22]

Extreme events such as the Indian Ocean Tsunami, the various and serious hurricanes in the Central American region, and more recently the Haiti and Japan earthquakes produce tragic and immediate suffering. They are also often incurring the collapse of economic and social systems.[23] The examples above exceeded the world's disaster relief capabilities. Basically, ―the ability to organize and execute coordinated, effective response and relief efforts meeting the critical response factors of time, treatment of injured, shelter, food and coordination"[24] was strained to the limit. The difficulties are numerous; it is not the intent of this paper to analyze in detail this aspect. It is important to analyze how the relief efforts can be coordinated. Concerning the process of mounting and managing a coordinated operation, Hoffman proposes three threads which explain success, or failure or a disaster relief mission.[25]

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[22] Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P. 23

[23] John R. Harrald, "Agility and Discipline: Critical Success Factors for Disaster Response," *Annals of the American Academy of Political and Social Science*, 604, no. 1 , Shelter from the Storm: Repairing the National Emergency Management System after Hurricane Katrina (Mar., 2006), pp. 256-272, http://www.jstor.org/stable/25097791. P. 256;

[24] E. G. Major Cloutier, "The Canadian Military and its Participation in Natural Disaster Relief Missions Around the World" (Masters of Strategic Studies, Canadian Forces College), 1-32, P.12

[25] Hoffman and Thomas G. Weiss, *Swords & Salve: Confronting New Wars and Humanitarian Crises*, pp.125-127

Cooperation represents the non-binding, usually informal arrangements between humanitarian agencies. This is a complementary approach that aims to harness the efforts of the agencies without forcing them to subscribe to a set goal or single mandate. While non-discriminatory, this approach lacks efficiency. Indeed, the diversity of aid agencies and their relative ability to fulfill their own mandates is sometime questionable. Further, in a chaotic environment such as during a disaster, communication is difficult. It becomes almost impossible to know which agency is on the ground.

The second trend identified by Hoffman is a higher degree of formalized coordination: centralization. This occurs relatively easily when the local government is capable of controlling the situation through its own lead agencies. Failing that, IOs such as OCHA or the UN representative may be enabled as planner and bring some coordination of efforts.

The last trend is the integration of the humanitarian agencies into a team that resolves political differences and addresses the needs in a systemic way. Various governments, such as Canada through DFAIT and START[26], try to employ this method to coordinate their relief efforts in a disaster area. However, it presupposes that a majority if not all the players will accept subordination to a local, national or international lead agency.

This attempt to unite means and thereby make international efforts more efficient is worthwhile, but still in its infancy. The UN and international agencies try to rationalize the relief efforts through various means: the Oslo Guidelines, the Sphere Project and the

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[26] This point will be elaborated further in Chapter 3.

creation of OCHA are examples of regulatory attempts.[27] However, two contentious aspects of those trends are identified. First is the aspect of freedom of action of agencies; second is the ambiguous role of the military in humanitarian aid missions.

Military engagement in past disasters was often received positively by the populations and aid organizations alike. Some humanitarian organizations even started to see the military as a valuable contributor during disasters.[28] However, when a disaster occurs in an insecure or violent environment, aid agents tend to revert to their traditional roles. Civilian organizations will provide aid to anybody in need indiscriminately, at least in principles, while the military works to establish security, sometimes by using force, other times through means similar to those used by the humanitarian organizations.'[29] When this happens, the roles become blurred. Aid providers then question whether the military assistance is more damaging than useful. Further, it negatively affects the perspective of freedom of action so dear to various organizations.

In his analysis of the Iraq conflict, Burkle agrees with the several opponents of military intervention in HA scenarios:

> The operational lessons learned are listed and the conclusion is reached that, to avoid the problems experienced in Iraq, military and humanitarian operations should as far as possible be separated, leaving the leadership of relief to the dedicated international

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[27] United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), *Oslo Guidelines - Guidelines on the use of Foreign Military and Civil Defence Assets in Disaster Relief Revision 1.1* (New York,: , November 2007), 1-40; United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), *Guidelines on the use of Military and Civil Defence Assets to Support United Nations Humanitarian Activities in Complex Emergencies*, 1-21; International Strategy for Disaster Reduction, "Surviving Yasi is due to Planning, and Not Miralce, Siad UN Top Disaster Official," United Nations International Strategy for Disaster Reduction Secretariat (UNISDR), http://www.unisdr.org/news/v.php?id=17503 (accessed 4 February, 2011).

[28] Bradd C. Hayes and Jeffrey I. Sands, *Doing Windows: Non-Traditional Military Responses to Complex Emergencies* (Washington: CCRP, 1997). P. 17-35

[29] Gordenker, Leon, and Thomas G. Weiss, "Humanitarian Emergencies and Military Help: Some Conceptual Observations," in *Humanitarian Emergencies and Military Help in Africa*, ed. Thomas G. Weiss (New York: St Martin's Press, 1990), P1-7

agencies but setting ground rules for liaison and lateral communication with the military which leave humanitarian response outside the political arena. A necessary condition for this would be the reform of the legal framework for UN response:[30]

Burgess nuances this premise by stating that the responsibility for alleviating disaster conditions rests primarily with the population, private agencies and local and state governments. But he recognizes the capabilities of the armed forces due to their organization, resources and equipment. There is evidence supporting that governments often turn to the military for help during disasters, as they normally have ready access to resources such as food, and medicine, and the logistics capacities to provide transport, goods, and human assets to distribute them.[31] At the earliest stages of a disaster regional militaries can provide relief which would not otherwise be given in a timely manner.[32] Yet this argument loses its value when humanitarian aid organizations are already in-theatre. The UN is keenly aware of the potential conflicts between military and civilian aid. It has spent efforts in trying to rationalize, coordinate and integrate the international relief efforts.

Humanitarian and Military Space

As stated before, the military possesses vital capabilities to support HOs. Yet the decision to use the military for humanitarian purposes demands an adapted approach to operations. This help must be constantly monitored and adjustments made to meet the

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[30] Frederick M. Burkle Jr., "Fortnightly Review: Lessons Learnt and Future Expectations of Complex Emergencies," *BMJ: British Medical Journal*, no. 7207 (Aug. 14, 1999), pp. 422-426, http://www.jstor.org/stable/25185525.

[31] Gordenker and Thomas G. Weiss, *Soldiers, Peacekeepers and Disasters*, P.118.

[32] Carter L. Burgess, "The Armed Forces in Disaster Relief," *Annals of the American Academy of Political and Social Science*, Disasters and Disaster Relief (Jan. 1957), pp. 71-79, http://www.jstor.org/stable/1031936.

requirements of the changing situation. The civilian–military cooperation requires not only an open dialogue. Both must plan and execute a comprehensive approach to aid. Weiss proposes that the chosen approach ―must recognize the separation needed between the *humanitarian space* and the *military space*, to avoid blurring the fundamental distinction between these two types of aid providers, and allow for coordinated action when the prevailing situation dictates that civilian organizations and the military must work jointly."[33] This phenomenon was coined under the terms: the *joint civil-military space*.[34]

Identifying the disparity between civilian and military's modus operandi does not result automatically to the admission that cooperation and information sharing is unattainable. But the cleavage between the actors must be identified, and ways to bring them together designed. It also means that both actors must understand the core motivation that incites actors to provide aid. The military will be driven by the political objectives of their countries' governments. In most cases, humanitarian aid workers are driven by concern for the affected population. Where these objectives and concerns coincide, effective civil-military cooperation can be established.[35] In fact, the military is used to be given missions in support of political objectives; it is its *raison d'être*. Therefore, if the political objective is a comprehensive approach aiming to create, say, a stable environment with full respect for human rights, the gap between them and the civilian humanitarian objectives is not as large as presented. So a common understanding can be reached, which would set the conditions for cooperation.

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[33] Thomas G. Weiss, *Military-Civililian Interventions: Humanitarian Crises and the Responsibility to Protect*, 2 nd ed. (Lanham, M.D.: Rowman & Littlefield Publishers, Inc., 1999), P. 139.
[34] NATO's Joint Analysis and Lessons Learned Centre, *Medical Civil-Military Interaction*, PP. 1-65.
[35] Alberts David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*, P.124.

But cooperation is virtually impossible when the affected population becomes a military target. As a result, the civilian organizations will aim to establish a stable operating environment, where aid can be delivered in as safe way.[36] This is sometimes referred to as "humanitarian space" and is defined by Wentz as ―the independence, flexibility, and freedom of action necessary to gain access and provide assistance to beneficiaries in a humanitarian emergency."[37] The military needs also its own sphere of operation, or *space*. In such a case, effective coordination of work toward the protection and help of the local population, when their objectives overlap, becomes essential. This enables and protects the humanitarian space as well as meeting the capacity-building objectives of the affected nation. However, this is difficult to achieve because of the cleavage between civilian agencies and the military. The role of a lead agency capable to close the gap is therefore paramount, to create a joint civil-military space.

UN and the Coordination of Humanitarian Aid

Composed of members from around the world, the UN represents the largest cooperative body in the world. Its functions are varied; but two are central in dealing with complex emergencies and humanitarian relief operations. UN peace operations are under the UN Department of Peace Keeping Operations' (DPKO) responsibility. The Office for the Coordination of Humanitarian Affairs (OCHA) is responsible for the coordination of relief. In countries affected by humanitarian emergencies, the UN will

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[36] Bellamy, Williams and Griffin, *Understanding Peacekeeping*, P 246.
[37] Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P. 29)

normally appoint a Humanitarian Coordinator to take the lead.[38] His role is to coordinate relief efforts while respecting the diverse conventions in place, such as the Oslo guidelines.[39]

When a conflict or a disaster arrives to a level where the UN authorizes or requests military support, it will normally turn first to an existing peacekeeping force. However, this is problematic, since peacekeeping missions are structured to respond to the local issues and may not have the capacity to provide support. But while the general understanding for military employment is that it is a force of last resort, the situation in the disaster area may be that the military forces are the only one available to fulfill the role of first respondent. However, when the operational focus shifts from humanitarian assistance to reconstruction, civilian and military role may become blurred and can interfere in their individual space.[40] The importance of coordination and cooperation cannot be overstated. To alleviate potential conflicts, the UN coordinator must ensure that a timely and seamless transfer of responsibility between civilians and military occurs. Further, since military intervention is normally a short-term focus, the long-term development strategy must be in place early in the intervention.

The actors

A broad number of players operate in theatre, either from the civilian side (NGOs or UN Agencies) or the military (particularly if there has been a multi-national force put

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[38] OCHA, *Civil-Military Relationship in Complex Emergencies* (New York: UN, 2004).; United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), *Oslo Guidelines - Guidelines on the use of Foreign Military and Civil Defence Assets in Disaster Relief Revision 1.1*, 1-40.

[39] Ibid.

[40] Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P.28

together, as in East Timor, the former Yugoslavia and Rwanda).[41] These *actors* [42] are not homogeneous; although they may share similarities, they will invariably have different perspectives and agendas. They will operate under a set of procedures that will differ completely from one to another (SOPs). The task of the lead agency to ensure the effective, and smooth management of the relief operation will be complicated, and exacerbated by the conflict related to NGOs perceived the freedom to operate vice the UN's need to install some sort of coordination of the effort.[43] The actors compete and disagree on an array of issues that undermine the efficiency of relief efforts. While some encouraging attempts to engage actors in adopting standardized practices, issues of coordination, control, publicity, conflict of interests and funding have yet to be resolved. This will therefore influence the perspective and motivation to coordinate of each actor. Consequently, this will also affect their interactions with military deployed in support of the humanitarian mission.

The relationship between the International Organizations (IOs), the inter-Governmental Organizations (IGOs) Non-Government Organizations (NGOs) will therefore depend on their perspectives. It is entirely possible that they will cooperate on specific issues, such as security or common geographic concerns. But as each aims to achieve different objectives it imports to understand their characteristics and their will to cooperate before attempting to integrate their efforts. It may be that the best to hope for is

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[41] Alberts, David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*, P.63

[42] For the benefit of clarity, throughout this paper the term *actor* will refer to civilian actors, irrespective of their origin (IO, IGO, NGO, business).

[43] Stating the following: Molinaro, 2000; de Mello, 2001; Moore and Antill, 2000c; Tomlinson, 2000), A. Hawley, "Rwanda 1994: A Study of Medical Support in Military Humanitarian Operations," *Journal of the Royal Army Medical Corps* 143, no. 2 (06, 1997), 75-82, http://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=9247858&site=ehost-live.

information sharing and the monitoring of their activities, in order to reallocate the resources of those cooperating elsewhere.

Sovereign nations usually provide a significant amount of aid, depending on their means and political objectives. Several donor nations are however concerned how their aid is perceived, but also how efficiently is it employed. To this end they created agencies that will implement the nation's assistance according their governments' policies, or objectives. Those actors execute the development strategies for their governments. They are as well commonly responsible for providing rapid assistance in response to appeals for aid from affected governments and from the other actors, such as the UN.[44]

Of many different types and size, NGOs constitute the main *interface* between the *relief system* and the *beneficiaries* and are almost at the end of the supply chain. The position they hold as the implementers of aid relief can conflict with their stand as advocates for such relief.[45] NGOs are independent by nature. They are not part of their governments, and their policies are not affected by donors. Further, the UN does not have any authority over the NGOs. The UN must persuade the NGOs to cooperate, but cannot direct their work. Since the NGOs are the interface between the system and the beneficiaries, heir freedom of activity becomes a ―wild card" when attempting to create a comprehensive approach to relief. It must be taken into account when preparing a deployment.

The characteristics (and potential) of each player is depicted at table 1 below. Interestingly, two characteristics emerge: all actors are formed for a specific purpose, and all are funded by national governments.

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[44] Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P. 12

[45] *The Effectiveness of Foreign Military Assets in Natural Disaster Response*, P.8-19

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Characteristics	IO	IGO	NGO	Business
Formed for a specific purpose	X	X	X	X
Consultative body of National Governments		X		
Formed under International Humanitarian Law or Custom and Recognized as a sovereign entity	X			
Directed by representatives of National Governments		X		
Directed by private citizens	X		X	X
Funded by National Governments	X	X	X	X
Funded by private institutions or individuals	X		X	X
Not for profit entity	X	X	X	
For profit entity				X

Table 1: Characteristics of Potential Ops Global Participants. [46]

As well, this table identifies broad aspects and qualities that help to understand where each of the players stands in the civilian humanitarian space. The potential interaction between participants or preference herein can be better anticipated. This may affect the way coordination activities can be conducted with the military.

Canadian disaster relief operations

Canada has assisted in numerous disasters struck countries and the CF has been called upon on many occasions to provide personnel, materials and transportation for emergency relief missions.[47] Canadian past relief efforts has been numerous and took

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[46] The table does not take in consideration that some UN agencies will accept private funding. However, this is not generally the case. Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P. 19

[47] Major Cloutier, *The Canadian Military and its Participation in Natural Disaster Relief Missions Around the World*, P.4:

several forms. During the cold war, the focus was mainly on the provision of money and supplies, normally flown in by CF transports. In the 1970's Canada provided relief to Peru, Nicaragua and Honduras. In the 1980's, relief efforts constituted mainly of the same form; however in two occasions a small detachment of Canadian military personnel were dispatched to try helping in the relief efforts. In 1980 a small medical detachment was sent to provide medical aid in Italy after the 1980 earthquake; and in Mexico-City in 1985 air force specialists were employed to help regulating the airport's control systems.

Yet the military relief efforts suffered from various ailments: the early rescue efforts were slow and confused as they lacked coordination. The effort did not address the immediate needs in medical support, and the CF did not have a readily available, centralized supply of equipment and personnel available.[48] To be fair, Canada was deep in the Cold War and the meager resources the CF possessed were prioritized in its commitments to NATO and Peacekeeping operations. Intervention in disaster areas was left to civilian authorities, such as the UN and the few NGOs that existed at the time. If Canada participated in some humanitarian assistance tasks during peacekeeping operations, it was more under an *ad hoc* arrangement than anything.[49]

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[48] Ibid. P 5 to P 11

[49] The Old BG-300 stated that: ―While the provision of humanitarian assistance remains principally a function of the humanitarian enterprise military assets, when not in use for their core security tasks, may be made available to assist in humanitarian assistance work on a temporary, ad-hoc basis. When military assets are used in such efforts these are termed humanitarian assistance tasks. These tasks serve no particular military end." This document has now been replaced and further modifications are underway.

Rwanda and the beginnings of the DART

The end of the Cold War allowed Canada, like many of her allies, to adopt a different, more interventionist approach toward humanitarian aid. 1994 marked the beginning of a new era for Canadian military interventions in humanitarian aid. Witnessing the horrors of the genocide in Rwanda, the Canadian government agreed to ~~provide~~ medical assistance to the thousands of refugees suffering from the effects of a widespread cholera epidemic."[50]

2 Field Ambulance, a medical unit, was dispatched in August 1994 to provide medical support and water purification services in support of the United Nations High Commission for Refugees (UNHCR) in Rwanda. It formed the nucleus of the task force seconded to UNHCR. The unit comprised of a Headquarters Platoon, a Medical Company, a Services Platoon, and Engineer Troop and a Defence and Security Platoon. OP PASSAGE was also supported by units deployed in Rwanda as part of OPERATION LANCE (UNAMIR).[51]

During the operation, the unit provided excellent treatment But it was determined that unfortunately the unit arrived too late to help with the epidemic, which was largely resolved by the time of the arrival of the Canadian unit. Nevertheless, the Canadian government identified several lessons after the deployment and it was identified that the provision of effective aid at the onset of a disaster was dependent on a capability to

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[50] Lieutenant-Colonel Keith Osmond, "Is the Canadian Forces Disaster Assistance Response Team (DART) Hitting the Mark?" (Masters in Defence Studies JCSP 35, CANADIAN FORCES COLLEGE), PP. 1-11

[51] Canada. Department of National Defence, *3301-18 (J3 Plans (C) 5) OPERATION PASSAGE - SUMMARY OF LESSONS LEARNED* (Ottawa: Deputy Chief of the Defence Staff, 10 November 1995), P.1

respond rapidly. The answer to this issue was the creation of the CF Disaster Assistance Response Team (DART).[52]

The other lessons from this first real deployment have also had a serious influence on the CF concept of humanitarian aid; thus they need to be reviewed to identify the trend that were fixed, and those still needing work.

First, the unexpected insertion of a ―national" operation into a theatre where the CF was already involved[53] resulted in the requirement to reassess the CF command and control procedures that existed then. New C2 arrangements based on OP PASSAGE and OP DELIVERANCE experiences were incorporated.[54] Perhaps the definition of the current concept of JTF structure and C2 deployment is the result of the lessons learned then.

Secondly, the issues pertaining to national agreements and international laws identified the need to coordinate intimately with other departments such as DFAIT. Indeed, the coordination of ―pre-clearance" arrangements before the arrival of the troops in-theatre and the signing of a status of Forces Agreement (SOFA) when Canadian assistance is requested take time and expertise that the CF does not possess.[55] The advent of the Whole of Government (WoG) approach integrates better the efforts of each department since then.

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[52] Lieutenant-Colonel Keith Osmond, *Is the Canadian Forces Disaster Assistance Response Team (DART) Hitting the Mark?* P.10

[53] OP DELIVRANCE was the nickname of the Canadian intervention in Somalia. Originally sent only to support the CF, the medical unit did provide humanitarian aid, as part of a ―Hearts and Minds" initiative. http://www.cmp-cpm.forces.gc.ca/dhh-dhp/od-bdo/sr-rr-eng.asp?PageIndex=4&SortBy=CFOpName e&SortOrder=

[54] Canada. Department of National Defence, *3301-18 (J3 Plans (C) 5) OPERATION PASSAGE - SUMMARY OF LESSONS LEARNED*, P. 1

[55] Ibid. P. 5

Finally and most importantly, these operations demonstrated the need for a better cooperation and coordination with the diverse agents involved in humanitarian aid and relief operations, both at home and abroad. During relief operations, the military contingent will normally operate within a larger group of actors. Even when self-sufficient, which is rarely the case, the contingent cannot work in isolation. For example, the DART is considered as a true force-multiplier in a natural disaster emergency; yet without appropriate and improved coordination with external agencies the DART's capabilities are often superfluous.[56] Since then, the CF has improved their coordinating capability by adopting the concept of Civilian Military Coordination (CIMIC). Also, by espousing the precepts of the Canadian comprehensive approach (3Ds, now the WoG approaches), the CF is now better able to communicate and coordinate with the other Canadian and international agents.

Haiti and the Comprehensive Approach to Disaster Relief

For the better part of the 1990's and the 2000's the DART represented the biggest part of the CF intervention in humanitarian relief operations. The CF made a priority to improve its capability to intervene; the application of lessons learned from each DAT deployment has allowed the DART to evolve. Yet this progression is also affected by the political influences: the DART is ̶t̶he designated, high readiness, military piece of a Whole of Government (W of G) approach to humanitarian assistance and disaster

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[56] Lieutenant-Colonel Keith Osmond, *Is the Canadian Forces Disaster Assistance Response Team (DART) Hitting the Mark?* P. 60-61

response."[57] Indeed, DART fits well within the Canadian government comprehensive approach[58]: ―The DART is a physical extension of Canadian values and it is much more tangible than an increase in aid funding."[59] It may be consider as disaster relief on the cheap, with major dividends in the P.R. department. But the costs associated with the deployment of the DART are still high, in comparison with similar civilian capabilities by NGOs.

Yet, once again when disaster struck in Haiti mid-January 2010, the Canadian government decided to deploy an unprecedented number of soldiers in a disaster relief effort. OPERATION HESTIA[60] saw the deployment of over 2,500 soldiers, mariners and airmen in Haiti.

This operation also saw for the first time since the Korean conflict the deployment of a Canadian Field Hospital entirely manned by Canadian medical personnel. However, the deployment of the hospital was almost an afterthought: the decision to send the hospital was not taken before five days into the crisis, and its deployment took over 12 days. The hospital accepted its first patient *17 days after* the disaster occurred.[61] While it helped the population, most of the hard work was over. Further, its late addition to the command structure caused difficulties in integrating both the command structure and the humanitarian space. As well, considered as a supporting unit to JTF HAITI, it lacked the

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[57] Canada. Department of National Defence, *BG-04.002E - Canadian Forces Disaster Assistance Response Team*, http://www.comfec-cefcom.forces.gc.ca/pa-ap/nr-sp/doc-eng.asp?id=301 ed., January 10, 2005) Lieutenant-Colonel Keith Osmond, *Is the Canadian Forces Disaster Assistance Response Team (DART) Hitting the Mark?* P. 66

[58] Yet, the DART has its detractors. Main complains found in various magazines and newspaper articles consider it too slow, too onerous, and too small of a footprint, or not enough time spent in-theatre to make an impact. Those normally overlook that fact that DART is not really a first respondent, but fits into the *stabilization phase* of disaster relief operations.

[59] Ibid. P. 63

[60] Canada. Department of National Defence, "CEFCOM: Operation HESTIA," http://www.cefcom-comfec.forces.gc.ca/pa-ap/ops/hestia/index-eng.asp (accessed 4/29, 2011).

[61] CEFCOM Fact sheet Operation HESTIA at Ibid.

decision rights that would have enabled an intimate coordination with the civilian aids actors. Finally, the hospital lacked the C2 capability[62] that would have permitted to react to the changing circumstances of the situation.

DART was also part of the relief effort; its deployment was completed in record time. While not everything went right and the lessons identified are still being worked on,[63] this operation was also the very first time that the comprehensive approach to Canadian international intervention was planned and executed in concert by START, DFAIT, CIDA and the CF.[64]

In retrospect, one of the concerns from OP HESTIA resides in the lack of capacity to coordinate in-theatre with the three entities. For example, several NGOs and locals deplored that the redeployment of the military from Jacmel was done without having an appropriate NGOS, or government replacement.[65] This created a capability vacuum, which could have been prevented by a careful coordination by DFAIT, CIDA and the CF. As well, the medical units such as 1 Canadian Field Hospital were put within the traditional JTF C2 structure, without being provided with the opportunity to plan its own

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[62] The Field Hospital deployed with a command and control cell similar to the one at the Role 3 hospital in Kandahar, a static unit in a mature theatre of operation. This arrangement did not allow the command element to do very much more than to control the activities within the hospital; it was unable to communicate or to plan any type of operation outside of the area of the base.

[63] Canadian Forces Health Services Group, *Canadian Forces Health Services Group Surgeon General's Report : Campaign Plan for the Canadian Forces Health Services Group* , 2010), 1-56. Canadian Forces Health Services Group Surgeon General's report Address

[64] Both CIDA and DFAIT deployed personnel in Haiti. The lead agency was DFAIT. Canada. Department of National Defence, *CEFCOM : Operation HESTIA*

[65] Canadian Press, "Military Rushed to Haiti without Guns, Ammo," *CTV News,* 9 July 2010, http://www.ctv.ca/CTVNews/Canada/20100709/haiti-canadian-response-100709/ (accessed 04 May 2011); Ibid.; Jessica Leeder, "Departure of Canadian Forces Hampers Jacmel's Reconstruction." Jacmel, Haiti—from Wednesday's Globe and Mail Published Tuesday, Mar. 23, 2010 10:17PM EDT Last Updated Tuesday, Dec. 14, 2010 1:40PM EST," *The Globe and Mail,*23 Mar 2010, http://www.theglobeandmail.com/news/world/project-jacmel/departure-of-canadian-forces-hampers-jacmels-reconstruction/article1509932/ (accessed 04 May 2011).

deployment and coordinate with the local agents. This limited their ability to react and opportunities to help efficiently were lost.

Was it just a series of unfortunate circumstances? Or was it a glitch in the communications system between the three major players? Perhaps it is indicative that for all the transformation and sophistication the WoG system underwent, there is still an existing gap that needs to fill? It is entirely possible that the joint civilian-military space discussed above was not created sufficiently early to enable an effective transition from military support to civilian effort. In reality, this situation is more the result of the systematic decisions and the structure created for the mission in Haiti than any accident or ―badluck".

Thus two challenges are identified. First, there is an existing gap in the WoG concept; second, that the C2 arrangements will directly impact on the capacity to deliver aid and meet the mission's requirements. In preparation for future deployments, the C2 arrangements must be carefully weighted. Those two challenges were identified in both the case of OP PASSAGE and OP HESTIA. Therefore, a trend seems to be taking form. Both propositions will be discussed later.

Summary

This chapter determines the framework of humanitarian aid operations. It will present and analyzes the interaction between the disaster relief efforts participants, particularly the aid agencies such as Non-Governmental Organizations (NGOs) and the military forces. It considers the broad issues in employing military forces in disaster relief operations then examines how, during humanitarian aid operations, can the coordination

and cooperation between the actors can be more efficiently achieved. Finally it considers the evolution of the Canadian interventions and identifies the challenges that are faced in trying to elaborate the successful provision of humanitarian aid in a timely and effective manner.

This chapter presented the fundamentals of humanitarian aid operations. A quick analysis of the characteristics and interactions between the relief aids actors concluded that while each actor brings unique capabilities, their differences are such that a careful analysis of these is necessary while planning a relief operation. Considerations must be given to the creation of a civilian, military and joint civilian-military space. The civilian actors' participation to a coordinated effort, especially the NGOs is consensual. However, when planning relief operations, the most that can be hoped for is information sharing. The interaction between the civilian actors and the military during relief operations may only be possible in a permissive environment, or if the civilian agencies *need* protection from a violent belligerent. The consideration to use of military forces in disaster relief operations and the potential for coordination and centralization and integration between the actors will depend on the ability to define a consensual civilian, military and joint civilian-military space. Those represent aspects that will need to be analyzed further to see their influences on the conceptual model of C2 structure. Finally it depicted the evolution of the Canadian interventions and identified two challenges that must be faced to improve the CF humanitarian aid efforts, specifically for medical support, to meet the timely demands in an effective manner in the future.

The following chapter will explore further the CF concepts of operations in disaster relief efforts and try to qualify the influence of the Whole of Government approach in relation to the two challenges recognized earlier, and their effects specifically on medical units' deployment in disaster relief operations.

Chapter 3 The Health Services and the Canadian Forces in disaster relief operations.

The CF, and by extension the Health Services Group within, participate to disaster relief operations, as part of a comprehensive effort from the Canadian government. Canada's approach to response to disasters need to be described and understood within the Whole of Government (WoG) concept and its incidence on the Canadian Forces' employment during disaster will be depicted. The second part of the chapter will concentrate on the Health Services concept of operations and the issues that concern the employment of HSS during humanitarian relief operations. This aims to define which issues directly affect the ability to operate in the WoG environment during HOs.

CF: Canada First

> The Canadian Forces will need to be a fully integrated, flexible, multi-role and combat-capable military, working in partnership with the knowledgeable and responsive civilian personnel of the Department of National Defence. This integrated Defence team will constitute a core element of a whole-of-government approach to meeting security requirements, both domestically and internationally. [66]

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[66] *Canada First Defence Strategy,* (3 December 2010), http://www.forces.gc.ca/site/pri/first-premier/index-eng.asp. P. 3

The new defence strategy promulgated by the Canadian government quickly established the goals for the CF as an integral part of a Whole of Government (WoG) approach to international intervention. While hardly a new concept,[67] the WoG approach represents the foundation for Canadian intervention abroad, aiming at ensuring a more globally coordinated use of Canadian resources.[68] The concept will be developed further in this document; suffice to say for the moment that the CF constitutes one of the core elements of the approach. This evidently has permeated the CF's approach to operations. In order to rationalize and define its operations in harmony with this concept, the CF has amended its policy, implementing the concept of WoG throughout its doctrine.

While its main concepts of Manoeuvre Warfare and Mission Command remained unaffected, [69] the effects-based approach to planning was adopted as a core tenet. Recognizing the ―requirement to employ the military in harmony with diplomatic and economic efforts to find long-term solution to crises,"[70] this philosophy enables a holistic intervention which in theory would secure a more favourable and durable, outcome. This affects specifically the commanders, as they are expected to assess the impact of their decisions and actions on more than the traditional aspects of warfare. This tool, according to doctrine, supports the operational art, linking tactics with strategic aims.[71] Effects-based operations (EBO) are ―the synergistic application of the full range of a nation's capabilities at the tactical, operational and strategic levels."[72] Thus it complements well the WoG approach. Of course, EBO thinking has permeated also in the doctrine relative

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[67] Several countries, such as the United States, are trying to operate in similar fashion.

[68] Canadian International Development Agency, ―Humanitarian Assistance", http://www.acdicida. gc.ca/CIDAWEB/acdicida.nsf/En/JUD-1261545-RJU; Internet; accessed 09 Februaryl 2011.

[69] Canada. Department of National Defence, "B-GJ-005-000/FP-001, CFJP-01, *Canadian Military Doctrine*." (April 2009). PP. 1-4

[70] Ibid. P. 6

[71] Ibid.

[72] Ibid.

to PSO in general, and in HOs in particular. It imports now to analyze how this affects HOs, with a view to establishing how operations are affected.

The DIME and WoG paradigm

Diplomacy, Information distribution, Military actions and Economic interventions (DIME) is an American concept which acknowledges the influence of these factors on the outcome of any operation. [73] This concept requires commanders to consider all of these factors in the elaboration and execution of their plans. The goal is to avoid counter-productive and conflicting activities at the tactical level, by coordinating the joint intervention in all four fields. As such, this concept is not really different form the WoG Canada has adopted. However, the US Army does not have a reliable set of models to assess the results of their activities.[74] This seems to be the case for every country which applies the same type of concept. The role of each factor varying from one mission to another, it becomes difficult to develop a systemic pattern of interaction, which precludes the integration of DIME in the overall doctrine, leaving measures to be taken on an ad hoc basis.

Canada has also recognized the need to address the root causes of fragile states failure in a holistic manner. This concept aims to bring into action all the necessary tools of government – tools found primarily within the realms of Diplomacy, Defence and

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[73] Norman D. Geddes and Michele L. Atkinson, "Dime- An Approach to Modeling Group Behaviors and Beliefs in Conflict Situations", 46-58 http://opmexperts.com/modeling_group_behaviors_in_conflict_situations_geddes.pdf (accessed 25 April 2011).
[74] Ibid.

Development[75] but also others as required. The Whole of Government (WoG) approach is the result of the integration and coordination of the effects of these ―tools", the result being a unified, coherent and integrated governmental strategy on how to deal with the complex issues associated with state-building.[76] Generally speaking in the Canadian context, military commanders are not driving the WoG approach. This difference is extremely important, as the lead must be politically motivated, vice operationally minded. Coordination is at the highest level, leaving the tactical commanders with constraints and limitations which hinder their ability to attain the objectives fixed by those in charge.

A second issue stems from the fact that all governmental departments have different views of what WoG really means. In reality WoG seems to have been an *expansion* of the 3Ds approach, to mean the integration of stabilization, governance assistance and economic revitalization.[77] Evidently this will create confusion. This aspect will be discussed in following chapters.

Doctrinal concept for Disaster Relief Operations

As shown at figure 2 below, the spectrum of humanitarian Operations interventions for the CF varies from a benign intercession with the consent of the supported nation to a robust intervention in a hostile environment. In a hostile environment, the role of the HSS would be first and foremost to provide support to the

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[75] The defining of 3Ds, 3D+C or Whole of Government Approach concepts are contentious. From the literature prepared by the Canadian Government either these terms were used interchangeably, or define differently by DFAIT, CIDA and DND. See *Canada in the World: Government Statement,* Ottawa, 1995.
[76] Hugh Segal, "A Grand Strategy for a Small Country." *Canadian Military Journal*, 4, No 3 (autumn, 2003), P. 4
[77] Department of Foreign Affairs and International Trade *Canada's International Policy Statement: A Role of Pride and Influence in the World – Overview* (Ottawa: Canada, 2005), P. 11

forces in presence, and extra capabilities may be used to support humanitarian relief on exceptional occasions. This will be seen in further detail later. While support to civilians or actors that provide humanitarian relief is possible in either of the permissive, hostile or uncertain environment, it would become extremely difficult for an HSS unit to become employed as a manoeuvre unit since the focus of its mission is not on supporting the HOs at this point.
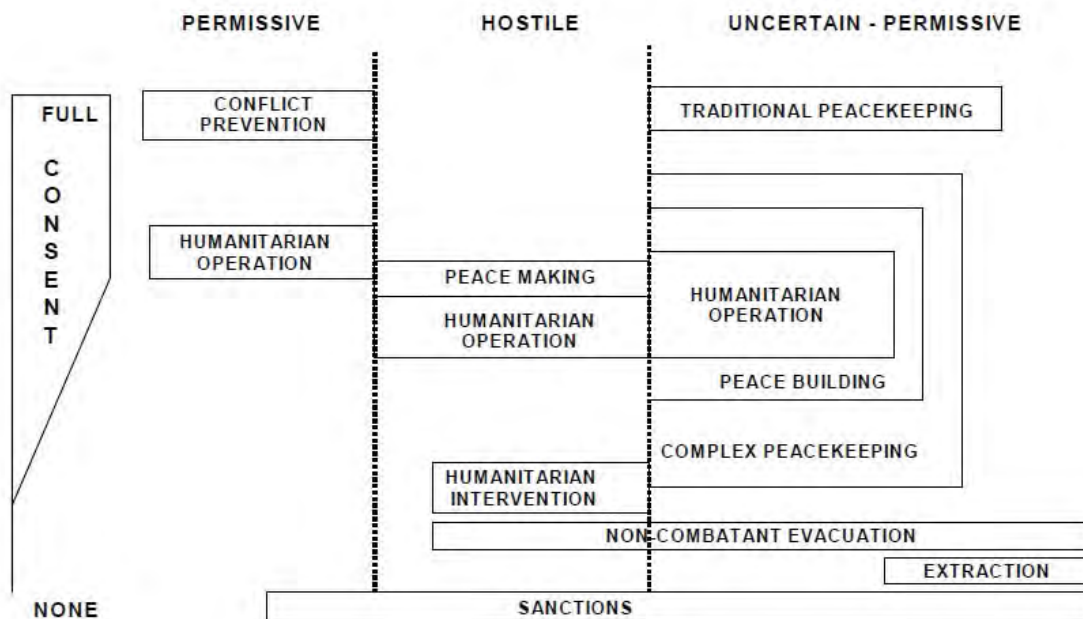
Figure 2: Humanitarian Operations in the International Environment.[78]

Albeit not one of Canada's main resources during HOs as will be shown further, as part of the WoG effort, the CF may be called upon to assist in the provision of humanitarian assistance. Canada thus has generally accepted the position presented in chapter 2. But it defines specifically the reason for this intervention. With a view to the humanitarian imperative' —the military is a resource that may successfully contribute to

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[78] National Defence, *B-GJ-005-307/FP-040: Canadian Forces Joint Doctrine Humanitarian Operations and Disaster Relief Operations*, 2005), P 1-3

alleviating suffering in certain circumstances."[79] This aid can take various forms; but it is typically provided to victims based on humanitarian imperative and takes two general forms. Those are humanitarian assistance; an aid which seeks to save lives and alleviate suffering, and development assistance, which a combination of long-term programs to develop living conditions.[80]

While there may be a role for the CF in the former, the latter type of assistance rests normally with other departments, in conjunction with international development agencies. A military intervention in these conditions aims to assist agencies of the humanitarian enterprise in the delivery of relief effort. It will normally only be born out of necessity and take place if civil agencies are unable to respond in a timely manner.[81]

The CF conducts Humanitarian Operations (HO) and DROs only as part of the Government of Canada's efforts, complementing the national response. This can include logistic support in the form of transport, the deployment of troops such as the DART, or a more robust intervention as in the case of OPERATION HESTIA in Haiti. Within the WoG approach, the CF's assistance goals remains similar to a Full Spectrum of Operations (FSO)[82] objective, i.e. to contribute to the success of the overall strategy developed by the lead agency.[83]

It is important to understand that Canada and the CF have adopted a concept of three stages regarding disaster response, which can be summarize as the Immediate Life Saving phase, the Stabilization phase and the General recovery phase. While these stages

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[79] Ibid. P 1-1
[80] Ibid. P. 1-2, 1-3
[81] Ibid. P 1-3
[82] FSO may include combat if necessary, depending of the mission attributed, and the level of violence, uncertainty and permissiveness in the theatre. In such a case, the HSS' priority is to support to those units in combat.
[83] Ibid. P. 1-4

are unlikely to be discreet, the CF's level of intervention normally decreases as the effort proceeds toward the general recovery phase.[84]

In doctrine, the provision of relief is primarily the domain of civilian agencies. HOs are conducted in complement to the existing activities by the host nation and the international actors. Should a task Force (TF) be deemed necessary, it will provide specific support to fill a resource gap, such as medical aid, and be limited in scope and time.[85]

There is no template solution existing for HO or DRO; all will depend of a series of factors influencing the government's decision to help. Yet the need for a coherent approach in response to a disaster presumes coordinating the resources to be deployed. The determination on how to most effectively respond will be jointly taken by the departments, based on needs and resources available. Military assistance will be tailored to the operational environment and capabilities needed, after coordination takes place with the other participants involved in the crisis.

Coordination of Humanitarian relief

Unless a nation is unable to handle a crisis because its infrastructure or its governance capabilities are overwhelmed, the coordination of the relief effort normally rests with the national authorities of the stricken state. However, IOs such as the UN Office for the Coordination of Humanitarian Affairs (OCHA) can be requested to help and then will mobilize international help. Canada can decide to take part of this

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[84] Ibid. P. 1-4
[85] Ibid. P. 2-7

international effort, or act bilaterally; suffice to say that political and economic aspects will be taken in consideration prior to any decision to support is reached.

Since a host of IOs, NGOs and donor organizations are typically involved in relief operations, close and early coordination is key to avoid duplication and chaos. The Canadian concept of intervention marries the WoG approach in the sense that integrate planning will take place to enforce the Unity of Effort in the relief intervention abroad. In the WoG concept, the CF will rarely be the lead department.[86] This lead role, as stated below normally rests with the Department of Foreign Affairs and International Trade (DFAIT), through the Stabilization and Reconstruction Task Force (START)[87], or the Canadian International Development Agency (CIDA), and is decided by the government. DFAIT seeks to ―encourage a whole-of-government Canadian response that is timely, coordinated, coherent and focused on meeting relief and recovery needs in support of affected governments."[88] In particular, one objective of Canadian humanitarian action is to ―ensure an effective, appropriate and timely Canadian response to humanitarian crises abroad that is coordinated with the international community and is consistent with the principles of Good Humanitarian Donorship."[89] This policy is also represented in CIDA‘s commitment to timely and effective humanitarian assistance: ―CIDA‘s primary response

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[86] DFAIT from http://www.international.gc.ca/humanitarian-humanitaire/faq.aspx

[87] To enhance the Government of Canada‘s capacity for international crisis response, the Stabilization and Reconstruction Task Force (START) was established in September 2005.

[88] DFAIT from http://www.international.gc.ca/humanitarian-humanitaire/faq.aspx

[89] Canada. Department of Foreign Affairs and International Trade. *Humanitarian Affairs*, Ottawa: August 2008; http://www.international.gc.ca/humanitarian-humanitaire/index.aspx; Internet accessed 07 February 2011, P_.1

to crises is financial support to organizations that make up the international humanitarian system." [90]

The Canadian government will decide of the nature of its intervention once the assessment of the situation is completed, based on the joint recommendation of the departments involved. This help can take several forms but is better resumed as such: it be a combination of cash contribution, the deployment of technical experts, the distribution of relief stock through CIDA or the deployment of CF resources such as the DART. However, it should be noted that ―a DART deployment can only be considered when there has been a formal request from the government of the affected country",[91] as for example the request for a Canadian intervention in January 2010 from Haiti and the UN. This entails, obviously, that bilateral and multilateral discussions and coordination will take place.

This highlights the importance of integration and inter-departmental coordination in the WoG approach to disaster relief operations. It aims to enhance the ability to prioritize, ―allocate, and undertake appropriate tasks, with a view to withdrawing military forces as soon as disaster coping mechanisms have recovered." [92]

Consequently, the CF will be called to interact with unusual contributors without having a lead role and it will be subject to strategic, legal and political constraints. Acknowledging that the military will not be the lead in the effort, it is entirely possible that a traditional command structure is not effective. A balance of responsibility and

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[90] Canada. Canadian International Development Agency. *Canada's Commitment Information for Partners Related Sites*, Ottawa: March 11, 2008 http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/JUD-1261545-RJU; Internet accessed 07 February 2011

[91] Canada. Department of National Defence. Canadian Expeditionary Force Command – *CEFCOM CONPLAN 20851/06 GRIFFON...*, P. 2
[92] Ibid. P. 2-11

authority must be maintained between the military and the OGDs participating to the disaster response. C2 arrangements thus need to be taken into consideration when planning the generation of the Task Force (TF) structure and its deployment.[93] However, it is necessary now to indentify how the CF's structure will look during relief operations.

The CF Task Force (TF) in disaster relief operations

Once a humanitarian operation is authorized, the CF, as in the case of any mission, will create and deploy a task force (TF) in the Area of Responsibility (AOR).[94] Its nature and size will depend on the scope and the nature of the disaster; regional considerations, objectives to attain and capabilities available will also influence the structure of the TF. Because of the needs in transportation and specialized actions on the ground, it is reasonable to believe that the TF will be composed of elements of at least two (air and land) environments. In the case of OPERATION HESTIA, all three elements were integrated.[95] The generic command structure is depicted at figure 3 below.

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[93] Ibid P. 2-9: GoC policies and procedures and CF doctrine take into account relevant international guidelines such as the UN MCDA and Oslo ones. In case of conflict CF doctrine has primacy.

[94] From Canadian Forces Joint Publication (CFJP): A task force (TF) is a generic name for a temporary grouping of units, under one commander, formed for the purpose of carrying out a specific operation, mission, or task. A TF can therefore be of any size and composition and can be employed across the continuum of operations at either the operational or tactical level of conflict. When the TF is composed of elements from more than one environment, the adjective ―joint‖ is added to describe all aspects of the operation. For the purposes of this document, JTF is used to describe the formation used to carry out joint operations. Citation Canada. Department of National Defence, *BG-04.002E - Canadian Forces Disaster Assistance Response Team*; Canada. Department of National Defence, *International Operations*, 2011. CFJP 3 Operations P 4-1

[95] Canada. Department of National Defence, *CEFCOM : Operation HESTIA*
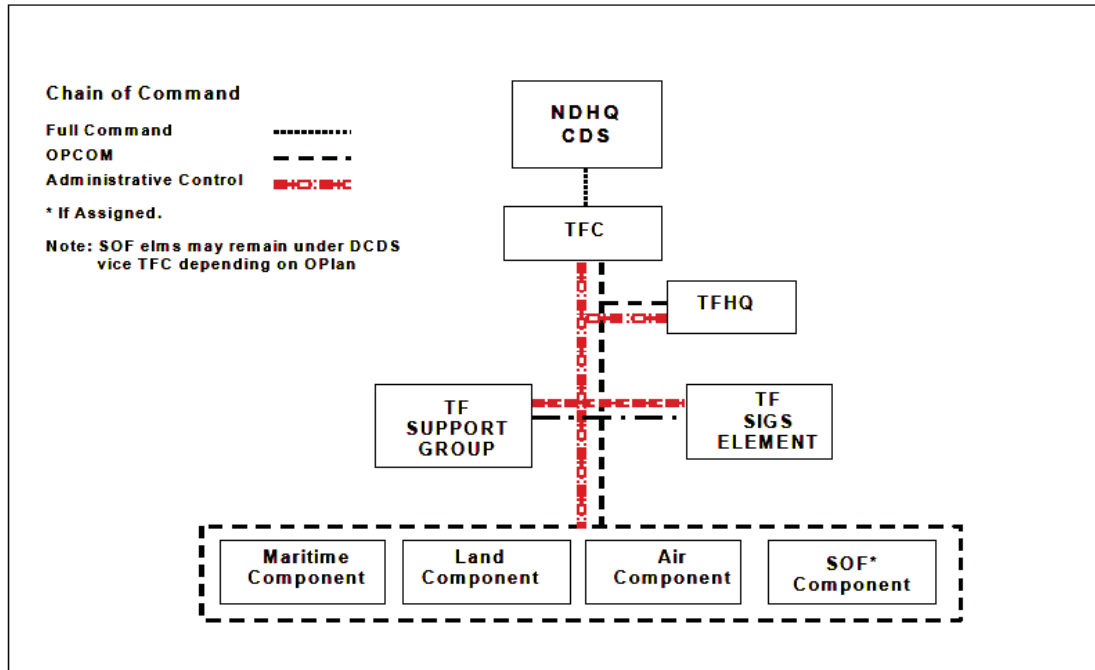
Figure 3: Generic Humanitarian and Disaster Relief Task Force.[96]

Establishing a JTF should be confined to the strategic level, leaving operational-level actions to the JTF commander and tactical actions to subordinate commanders. While the complexities of modern operations require collective training, the time of reaction in disaster relief may not allow this to occur. So one of the pre-conditions to the employment of the CF in HOs is pre-planning, and the application of contingencies plans such as CONPLAN GRIFFON, the generic plan of action for the deployment of the DART in support to HO and DRO missions abroad.[97]

As depicted at figure 3, because of its essential support nature, the medical elements will fall under the command TF Support Group. This represents as serious constraint in-theatre, especially when dealing with the coordination medical aid to

[96] National Defence, *B-GJ-005-307/FP-040: Canadian Forces Joint Doctrine Humanitarian Operations and Disaster Relief Operations*, P. 2-11
[97] In Osmond: Canada. Department of National Defence. Canadian Expeditionary Force Command – *CEFCOM CONPLAN 20851/06 GRIFFON-Deployment of the Disaster Assistance Response Team*, December 2006, P. 1.

civilian population. The C2 constraints will be dealt later in this document. However, before discussing the role of the HSS units, it is essential to understand how do Canada and the CF, coordinate humanitarian relief with all the players during a disaster.

Civil Military Coordination – CIMIC and NGOs

CF doctrine regarding CIMIC is relatively new, albeit coordination teams have been used since the early disaster relief efforts as a tool to foster cooperation.[98] The CF joint Doctrine on Humanitarian Operations states that ―Close cooperation should be established with humanitarian relief organizations and other non-governmental organizations (NGOs).‖[99] However, while coordination with government and NGOs is encouraged, security restrictions for the military on the one hand, and distrust from the NGOs on the other hand, pose significant constraints in the efficient employment of CIMIC teams during operations.

During relief operations, the civilian agencies are the critical enablers to a successful transition from ―just‖ saving lives toward the reconstruction of a country. However, a multitude of actors from diverse venues work in the same area.[100] The humanitarian aid actors depicted in chapter 2 and the international military efforts will share the ―relief space‖. Inevitably this can lead to duplication of effort, misunderstandings and competition between the groups. There is a strong possibility that

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[98] The CF Doctrine on Joint Humanitarian Operations discusses this matter in detail. Further, CIMIC is now integrated at all level of the command structure. Ibid.
[99] Ibid. P. 4-6
[100] It has been asserted that over 10,000 NGOs have worked in Haiti since the 2010 earthquake. However, this number has not been confirmed in the course on this research, but it shows the significance of NGOs activities and the scope of coordination problems within any given relief operations.

the ―blurring" of the lines discussed earlier will not only affect the military and civilian space, but also the diverse civilian actors as those try to create their niches in-theatre. Cooperation between the groups is therefore necessary for adequate coordination of the effort. Experiences from past relief efforts suggest the need to create a common culture of trust between civilian governments, military organizations, IOs, and NGOs.[101]

It is generally believed that information sharing and communications will be the lynchpin for the successful establishment of a coordinated effort. Civilian and military responders alike must evaluate the need for communications, (both verbal and electronic) and coordination in their response plans. [102] Information sharing is critical as no single entity can possess and distribute all required information. It also promotes coordination and offers a critical knowledge base with which decision can be made. But because of the disparity in means of communication, information structure must be as flexible as possible, without falling in the realm of the ―ad hoc".

Consequent to the WoG approach, the Canadian Government aims to integrate the relief efforts. This is even more so for the military, as its presence into the AOR will be normally very short. However, trust and mutual understanding do not grow overnight. The development of a sufficiently efficient working relationship prior to any deployment is therefore key to the successful coordination when disasters occur. To this end, federal

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[101] United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), *Oslo Guidelines - Guidelines on the use of Foreign Military and Civil Defence Assets in Disaster Relief Revision 1.1* (New York, November 2007), P. 1-40.

[102] Larry Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, Center for Technology and National Security Policy National Defense University ed. (Washington: National Defense University Center for Technology and National Security, June 2006), P. 5

departments such as DFAIT and CIDA are trying to build a holistic approach which includes pre-planning and exit strategy with NGOs, IOs and the CF.[103]

At first look, the critical areas for civil-military coordination can be divided in three parts: the provision of logistical support such as transport and communications; the provision of essential services such a medical, shelter, food and power; and the provision of security which may include the rule of law. Since the CF's involvement will depend first on the objectives identified by the government, and second on the capability available to support the relief operations, coordination before and during deployment is of critical importance.

As coordination with civilian agencies takes precedence in relief operations, liaison regarding the operations within the AOR will also take priority. Civil Military Coordination (CIMIC) teams become an invaluable asset to the development of a joint civil-military humanitarian, but also in the preparation of the handover of responsibilities which must take place prior to the CF's departure from the theatre of operations. Yet issues will often complicate CIMIC, the most strident being the ―differences in the command and control style of military operations and civilian activities."[104] Adequately employed, CIMIC teams can enable the successful implementation of a coordinated effort. Yet their roles must be balanced against the relative need to provide them with decision rights on matters they may have little understanding, especially in specialized areas such as medical relief.

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[103] Foreign Affairs and International Trade Canada, "Stabilization and Reconstruction Task Force (START): MOBILIZING CANADA'S CAPACITY FOR INTERNATIONAL CRISIS RESPONSE," http://www.dfait-maeci.gc.ca/ (accessed 04/25, 2011).

[104] Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P. 7

For example, the design and implementation of health programs such as hygiene and health education, vaccination programs, etc, has little chance of success if those are unsustainable once the military leaves the area. Therefore, a careful assessment of the needs vice capabilities available must be done, in collaboration with the civilian Health agencies, and NGOs or IOs already on site. The objective of such medical programs should always be that they are finite in time, and will not impose supplementary efforts to the civilian actors once the military has departed.

As well, the employment of the HSS must be first and foremost complementary to, instead of in competition with, local civilian authorities, NGOs or IOs already present in-theatre. Indeed, the military medical resources should be brought up forward only if civilian medical capability is not capable to support the population's needs. However, once deployed the military capabilities cannot replace the civilian infrastructure. This may mean, as in the case of the deployment of 2 Field Ambulance in Rwanda (1994), that instead of sending the medical unit within the confines of a refugee camp which already receives decent medical help from NGOs, the HSS unit will move into an area where it can provide treatment and care to a displaced population en route to the camp, whom many would not survive the trek due to injuries or sickness.

Also, there is a tendency to offer more support that can actually be provided. For example, many well intentioned commanders have decided to implement outreach programs (for instance in Haiti 2010) where teams of medical technicians would be sent in villages to provide help. However, the teams could do very little, because of the minimal amount of medical equipment available and expertise. Resources such as helicopters and vehicles had to be diverted towards the evacuation of patients to the Field

hospital instead of being employed for more pressing tasks. Outreach programs are extremely efficient when carefully planned with the civilian partners and if they apportioned the appropriate personnel, resources, and vehicles to meet the objectives.

Finally, technical advice on health matter demands the expertise that often CIMIC teams do not possess. For example, advices on preventive medicine (PMed) subjects such as pollution, health hazard avoidance, etc, can prevent epidemics such as cholera. Current situations must be carefully assessed and appropriate advice given.

HSS Role and Mission in Humanitarian Operations

HSS doctrine sets out the principles, guidance and description of the capabilities and organizations necessary to support the CF in operations. It is based on the premise that the *raison d'être* of the CF is war fighting. [105] So the concept of employment of HSS units is geared toward supporting the combat effort by providing treatment to military in theatre of operations. However, in the WoG approach the CF are required to undertake many non-combat tasks. Therefore, HSS must be capable to provide medical support as seen fit to meet the global objectives of a campaign, at any point of the Spectrum of Conflict. In HOs, the HSS does not merely support, but may become the main task, or at the very least one of the main lines of operations. Therefore, the approach to operations which has proven so efficient during combat operations will not automatically have the agility and the focus necessary to meet the demands of HOs.

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[105] Canada. Department of National Defence, *B-GJ-005-410/FP-000 Joint Doctrine HSS Support to Operations*, 2007, and Canada. Department of National Defence, *B-GJ-005-307/FP 040 - Humanitarian Operations and Disaster Relief Operations*, 2005, P. 1-4

The CF Health Service Group (CF H Svcs Gp) has drastically changed its *modus operandi* since the beginning of the Afghanistan war. Indeed, the experiences of the non-linear battlespace led HSS to move, as stated in Canada's Army, ―from fixed structures to a far more flexible approach based upon allocating capabilities as required and on providing complex levels of care as far forward as practicable and on a more dispersed basis."[106] Yet the roles of medical services remain unchanged: ―to promote health protection and deliver quality HSS to the CF, anywhere, anytime." [107] However, during combat operations, while the primary objective is to conserve the fighting strength of the supported force,[108] HSS must be capable to deal with a surge of patients for humanitarian reasons. In other words, if there is an incident such as an attack on civilian population that causes mass casualties, HSS units must be capable to support civilian patients. This is particularly true when deployed in operations at the lower end of the Spectrum of Conflict, where providing medical care to civilians may become ―the mission".[109]

This assertion must be nuanced against the provision of medical support to the civilian population during warfighting when it aims to support the WoG's objectives.[110] This type of support during PSOs is new; it is a new concept which brings its own set of issues. Yet considering that in certain phases of PSOs and during HOs the primary role of HSS is redirected towards civilians, a parallel can be drawn.

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[106] Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P. 35

[107] Canada. Department of National Defence, *B-GJ-005-410/FP-000 Joint Doctrine HSS Support to Operations* , P. 1-4

[108] Ibid. P. 1-5

[109] Ibid; and: Canada. Department of National Defence, *The Force Employment Concept for the Army - One Army, One Team, One Vision (2005)*, PP. 1-14

[110] Bricknell, M.C.M., and N. Hanhart, "Stability Operations and the Implications for Military Health Services Support ," *JR Army Med Corps*, no. 153(1) (30/4/07, 2007), P. 19

Indeed, even where support is provided by others, such as NGOs, there will be a need to coordinate its delivery, to ensure it conforms to the operational plan.[111] But also, the coordination will allow identifying the civilian and military humanitarian spaces and the area where both can work together. Further, the resource requirements to support the civilian population could be potentially vast. While the resource bill would be driven by military planning assumptions in PSOs, the needs of the population would take priority during HOs. In both cases, the extent of population management required and its duration, which is likely to be short,[112] it will directly impact on the HSS deployment as well as the aids agents operating in the area. These two concepts presuppose coordination with the civilian agencies already providing support, and are closely related to activities during HOs. They will be dealt in subsequent chapters. Finally, ethical concerns over the exploitation of HSS to directly support warfighting aims represents a serious challenge needing to be investigated. However, this last point is out of the scope of the present thesis; another research may be appropriate at a later time.

There have always been instances when the military has treated civilians. Yet this was normally done in an ad hoc manner, often at the result of mission creep.[113] Yet the developments in conflicts over the years imply a more formalized function in treating civilians. For instance, hearts and minds' campaigns may be well served by providing some sort of medical support. However, an expended role of the military in the humanitarian scene must be balanced against the perception of loosing impartiality, with grievous consequences for the security of the population and civilian humanitarian

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[111] Ibid. P. 21

[112] Ibid. P. 111

[113] Margaret M. Major Jones, "Military Medical Humanitarian Response for Civilian Disaster, War and Military Operations Other than War" (Master of Strategic Studies, School Air University), P.12

workers. But in the case of disaster relief operations, the military medical units perform a set of duties congruent with their practice i.e. *medical aid*, with humanitarian beliefs, *the needs of the most*, while the relief effort is being gathered, this perception looses somewhat of its value.

Each type and location of a given disaster brings it own set of issues. For example, medical interventions as the result of an earthquake will demand first and foremost the speedy deployment of teams capable to rescue injured population at the onset of the disaster, within the first few days that the disaster occurred. On the other hand, the response for epidemics, or the support to refugee camps demands that the medical unit be capable to provide more primary care than emergency trauma treatment. The epidemiology is too long to be of any value in the present document. Suffice to say that HSS units responding to disaster will be normally organized on a modular basis to answer the threat to the population. Their structures/organizations being a mission-specific assemblage of capability modules fused by appropriate command, control and information system (CCIS) and service support capabilities." [114] This requires therefore a careful assessment of the needs and available capability, to prevent the wrong resource to be sent and civilian efforts being duplicated, while still ensuring flexibility. The HSS must be therefore incorporated early-on into the planning cycle, and coordination with the civilian agents becomes essential. This coordination will also attenuate the dangers of *mission creep*, both from the expectations of the aids organizations and the population, but also from the demands of the military commanders.

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[114] Canada. Department of National Defence, *B-GJ-005-410/FP-000 Joint Doctrine HSS Support to Operations* , P. 6-13

Once deployed, the HSS units will fall under the TF commander as part of the JTF C2 structure.[115] As a supporting element, it will normally be incorporated within the Support Group and will have the dual role of caring for the deployed troops, while providing assistance to the local population. To fulfill the first part of the role, sub-units are cut under the operational command of manoeuvre units, while other elements will be left to provide aid to the civilians. For example, the medical platoon detached to the DART during relief operations will be dedicated to the medical aid. [116] Unless the deployment is uniquely medical such as the British exercises in Africa,[117] HSS units are rarely in command of an operation. The exception in recent times, as discussed earlier, was the deployment in 1994 of 2 Field Ambulance during OPERATION PASSAGE in Rwanda.[118] Being in support to UNHCR, the field Ambulance had the specific mission to assist in curbing the cholera epidemic and the task force was build with this in mind. The unit had the appropriate decision rights; yet it lacked the equipment and support necessary to properly conduct its mission.

This produces a certain number of issues. For instance, the HSS unit loose flexibility in the sense that a good part of its resource is controlled by other players. When *mission*

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[115] Foreign Affairs and International Trade Canada, "Disaster Response and Risk Reduction," (accessed 1/04, 2011).

[116] National Defence, B-GJ-005-307/FP-040*: Canadian Forces Joint Doctrine Humanitarian Operations and Disaster Relief Operations*, P. 59

[117] Exercise SHARPOINT is the annual deployment of a medical unit in Kenya where humanitarian aid is provided to tribes in location difficult to reach. The U.S. Army medical Corps has participated also to similar exercises in the past: *African Killers: Exercise SHARP POINT, African Killers: Exercise SHARP POINT,* (London: 2009); *African Killers,* June 9, directed by Army News Team (London: Army News Team HQ and Comms branch HQ Land Forces., 2009), http://www.youtube.com/watch?v=Ckvmtau59i4 (accessed 04 Feb 2011); and Major Jones, *Military Medical Humanitarian Response for Civilian Disaster, War and Military Operations Other than War*, PP. i-33

[118] Canada. Department of National Defence, *3301-18 (J3 Plans (C) 5) OPERATION PASSAGE - SUMMARY OF LESSONS LEARNED*, PP. 1-8; A. Hawley, "Rwanda 1994: A Study of Medical Support in Military Humanitarian Operations," *Journal of the Royal Army Medical Corps* 143, no. 2 (06, 1997), 75-82, http://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=9247858&site=ehost-live; and Larry Minear and Phillipe Guillot, *Soldiers to the Rescue : Humanitarian Lessons from Rwanda* (Paris: Thomas J. Watson Jr. Institute for International Studies Brown University, 1996), P. 126

creep occurs, these units will sometime decide to employ their medical elements dedicated a priori for the management of their soldiers' health for other means. For example, they may decide to run their own outreach programs with the population. These ad hoc arrangements disrupt the provision of aid by civilian organizations, and use resources inappropriately.

Secondly, the subordination of HSS prevents efficient and appropriate coordination with the civilian aid providers. There may be time where due to inappropriate positioning of an HSS unit and support to local population due to a lack of coordination will create duplication of efforts. This was experienced in Jacmel and Leogane; during OP HESTIA[119] without appropriate coordination with the NGOs, work was duplicated. For instance, mobile medical teams from the HMCS ATHABASKAN were sent ashore without coordination with NGOs already in place. This resulted in having two entities capable of the same effect in the same area, instead of being redirected where others may have needed help. Other medical teams were sent forward in small villages without having the capabilities that were needed; this resulted in having more evacuation of patients than local treatment.

As well, the HSS being subordinated to the Service Support unit, the HSS C2 normally will not have access to all information available to a manoeuvre unit. This may cause an improper assessment during pre-deployment planning, resulting in the inappropriate deployment of resources. Further, it also prevents the monitoring and

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[119] Canada. Department of National Defence, *CEFCOM : Operation HESTIA*; Major Dave McQueen, *The DART and Op Hestia: Helping in Haiti* (King , [15 october 2010]), http://www.epicc.org/uploadfiles/documents/Presentation2010/Haiti_DART_Presentation_for_Earthquake _Preparedness.pdf.

assessment of the fluctuations during the operation, preventing adjustments in the relief effort by either reallocating resources or moving their effort elsewhere.

The HSS doctrine is clear. A dedicated and structured HSS C4I system is the foundation of an efficient HSS structure: ―The HSS Headquarters must be capable of planning, executing, controlling, supporting and auditing the full range of HSS functions. It should also be capable of passing prompt and accurate operational HSS advice to commanders….Timely and accurate medical intelligence is required, from whatever source it may be available." [120] Unfortunately, when HSS unit is placed under the command of the support group and for the sake of limiting the amount of troops deployed, the HSS C2 is often the first one to be if not eliminated, at least severely diminished in resources. [121]

Summary

This chapter identified the context and concepts related to the CF's intervention during disaster relief operations. The presentation of the WoG approach identified that the interpretation of the approach differs from one contributor to the other, which may prevent a full integration of all resource. Notwithstanding, the CF has adopted the WoG in its doctrine, aiming to apply the WoG through EBO. The chapter also identifies the need for coordination with all actors, including NGOs, during disaster relief operations. It

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[120] Canada. Department of National Defence., *B-GJ-005-410/FP-000 Joint Doctrine HSS Support to Operations* , P. 7-3

[121] As J3 4 H Svcs Gp, the author was responsible for the preparation of the organization of the HSS units for OP HESTIA. The HSS HQ as proposed was all but eliminated. Yet during the operation, Headquarters elements needed to be sent as reinforcement when it was realized that the CSS unit was unable to follow the flow of the operation.

presented the CF doctrine, which integrates the WoG in its planning and deployment for HOs, using CIMIC as a tool for coordinating with the local actors. It also identified the HSS doctrine for support to HOs, noting difficulties within the C2 concepts, which may impede on the HSS ability to coordinate with the civilian aids agencies. This will impede on the HSS units' ability to plan and operate in a flexible, agile manner, in the delivery of medical aid to civilian. The next chapter will discuss the conceptual foundation which may help in correcting the issues identified.

Chapter 4 Conceptual Foundation

This chapter aims to define the gap in the WoG, and to elaborate a model that will allow the successful integration of the HSS units in disaster reliefs operations.

Effective military C2 depends on organized, effective, and efficient interactions with the entire range of relevant actors. Alberts believe that ―while military systems can be understood in terms of C2, this language is too narrow to describe the organizational and institutional arrangements necessary for humanitarian and disaster relief operations."[122] Further, the C2 construct will invariably be influenced by the uncertainty of a complex environment. This chapter will propose a conceptual foundation to base the C2 construct a medical unit would need to achieve success in a disaster relief operation.

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[122] Alberts, David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*, CCPR, May 1995), http://www.dodccrp.org/files/Alberts_Arrangements.pdf (accessed December 2010); Alberts David S., and Richard E. Hayes, "Power to the Edge: Command...Control...in the Information Age," *Information Age Transformation Series*, no. 3 (April, 2005), http://www.dodccrp.org/files/Alberts_Power.pdf; and Sharpe, Joe and Allan English, *Principles for Change in the Post-Cold War : Command and Control of the Canadian Forces* (Winnipeg: Canadian Leadership Institute, 2002), P. 34.

The Gap between DIME and the WoG

In a December 2008 interview, the Deputy Minister of the Afghanistan Task Force, said that the coordination of the various departments engaged in Afghanistan shifted: ―to move beyond the old ‗3D‘ approach of defence, development, and diplomacy, to a truly coherent whole-of-government approach."[123] It import to revisit the tenets of both the 3Ds+C approach and the WoG to identify the gap, if existing, between both and to elaborate a Command model for medical units deployed in disaster relief operation.

The CF recognizes the need for coordinating activities and effects in a comprehensive manner with the government participants. The CF‘s contribution to the WoG philosophy is founded on the effects-based philosophy it adopted. This seeks to encourage, whenever possible, a cooperative culture and to create a collaborative environment where all agents will work proactively to share information and plan activities together, with a view to implement ―favourable outcomes in the short, medium and long term." [124] Basically, while the WoG approach seeks to invigorate existing processes and strengthen the horizontal interactions between department and personnel, it still needs to adapt on individual circumstances and situation.[125] This rings particularly loud and clear in disaster relief operations, where a comprehensive approach would include actors beyond government. The key is not to leave out of the equation those that operate independently and that their activities have an effect on the overall result. This is

[123] Gavin Buchan, "Breaking Down the Silos: Managing the Whole of Government Effort in Afghanistan," *Canadian Military Journal* 10, no. 4 (autumn, 2010), P. 75-80; Government of Canada Afghanistan website, http://www.afghanistan.gc.ca/canada-afghanistan/speeches-discours/yir-1.aspx?lang=en)
[124] Canada. Department of National Defence, *B-GJ-005-000/FP-001, CFJP-01, Canadian Military Doctrine*, article 0615
[125] Ibid.

difficult to achieve unless there is integration, or at least coordination, of all the players involved in the relief effort.

For the CF, ideally planning should involve host-nation civilian partners to help in the transition to civilian-led national development and reconstruction. Further, in a WoG approach —the reconstruction of essential services and the provision of governance within an AOR will fall to entities and agencies other than the military." [126] However, since the various players may not be initially in a position to efficiently act in-theatre, the military may assist until the situation improves. This implies that any C2 construct must be capable to change as the context progresses. It also implies that the lead agency, in Canada's case normally DFAIT, will be in a position to communicate and coordinate de activities.

For the CF, this means that operations will often be characterized by the concurrent and often simultaneous provision humanitarian assistance, conduct of peace support operations in another area and fighting a lethal battle in yet a third. [127] Moreover, the requirement to transition from one type of activity to the next may be almost immediate. So the conduct of war, which is the CF mainstay, has changed to meet asymmetrical demands. Yet, while the WoG approach supposes network-enabled and effects-based operations, the C2 construct of the CF is not up to the task. It is far too rigid in its organizational structure to enable a flexible approach to operations.

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[126] For Civilian version see also: Lisa Witzig Davidson and others, "Humanitarian and Peace Operations: NGOs and the Military in the Interagency Process" (Washington, National Defence University, 18-19 April 1996); also Walt P. Perry, and John Y. Schrader and Barry M. Wilson, *A Variable solution Approach to Modeling Command and Control in Disaster Relief Operations* (Washington: Rand Corporation, [1993]); and Canada. Department of National Defence, *B-GJ-005-300/FP-000- Canadian Forces Operations* (Ottawa: National Defence, 2005), Chap 8
[127] Canada. Department of National Defence, *The Force Employment Concept for the Army - One Army, One Team, One Vision (2005)*, P. 5

Further, since the assistance to the department agencies may be part of the military mandate, there is a need to tailor to the particular campaign, as well as the diverse contributors, be it NGO, international agencies or commercial organizations. This will of course depend on the circumstances within the AOR, but also from the political direction the military will invariably receive.[128] Another dimension may be also that to achieve operational success, the military may need to engender popular support at the tactical level by pursuing close assistance. This was seen in Somalia, Iraq, and Afghanistan.[129]

So these actions taken by the military may vary in time and space, but also in kind. This will result invariably in the blurring of the lines discussed earlier, which can cause distrust amongst the Canadian actors and others, thus impeding on the outcome and good governance. However, while few of the civilian respondents will take direction from the military leaders, success depends greatly on dealing with them effectively. Thus, there is a need for flexibility, but also discipline, as well as a systemic analysis of the situation and potential effect, and communication between the actors.

The example of Operation HESTIA showed serious reservations in the ability of the traditional C2 construct to show the essential agility that the WoG needs to be effective. While the military deployed early and possessed clear capabilities on the ground, it lacked in the ability to exercise command in Haiti. It took several days for the Command apparatus such as staff, headquarters and communications systems to be build up to an efficient level. Failures were various, but it is the disparity between authority and

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[128] Canada. Department of National Defence, *B-GJ-005-300/FP-000- Canadian Forces Operations* (Ottawa: National Defence, 2005), Chap 8, article 0828
[129] Alberts, David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*, P. 63

responsibility among agents that was considered the main issue, as it prevented a systematic and integrated approach to relief.

For fear of an un-coordinated effort, the higher level headquarters retained authority to execute items which should have been delegated. Further, the planning of the transition from relief to reconstruction and ultimately the replacement of the military by other actors was confused, and poorly directed. Representatives of DFAIT and CIDA were not able to communicate, thus unable to direct the relief effort before the operation was well under way and that a ―joint humanitarian space" was developed. The medical, engineer and other specialized crews interacted randomly with the local population and NGOs already on the ground to help the population, to improve infrastructure and provide medical help. This continued until far into the mission, when the integration of the diverse actors was finally completed and that relief effort could be done systematically.[130]

This shows the major issue of the WoG approach, which is the very reason for its existence to start with: the difficulties of horizontal organizations to coordinate actions without an appropriate C2 construct. It suffers basically of the same issues its predecessor, the ―3Ds" approach experienced. Furthermore, disaster relief operations are essentially reactive in nature. Yet the military has a tendency to act proactively, by planning contingencies well in advance and trying to implement those contingency plans when necessary. [131] This basically puts the CF in the ambiguous position of ―leading

[130] Brigadier-General Joe Sharpe, Lecture on ―Comparative Command; Op HESTIA: Command Challenge C/DS 542/PDM/SM-1" (Toronto, 15 November, 2010).
[131] Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P. 29

from the pointy end", thus the direct opposite of the global outcome the WoG subscribes to.

In a speech in 2008, Stairs contented that, whilst attractive, the 3D approach showed several difficulties.[132] Amongst those he perceived the main issue being that the model was too static. Indeed, the approach lacks a capability to integrate the process and communication of information and the coordination of the efforts. As the conditions on the ground fluctuate faster than the system can find answers to the issues at hand, the result is that the efforts lag behind the aim and defeat the purpose of the approach. [133]

While the WoG approach is supposed to have taken into account the issues that Stairs pointed out, the results on the ground during OPERATION HESTIA show unfortunately the same effects. While a traditional command structure is not advisable, the lack of *joint civilian-military humanitarian space* is the gap that needs to be addressed in WoG operations. Command and control may be the means to close that gap, but it needs to be modified to meet both civilian and military needs alike. While Command is the military effort to deal with uncertainty, the leadership component of C2 helps by creating its own capability and ensuring that those forces perform effectively. This can come from anywhere, and can be integrated.[134] As Van Creveld ably stated: ―The systems that provide information about the warfighting environment and communicate that information and the commander's directives throughout the command are also crucial for success." [135]

[132] Denis Stairs, Speech "The Menace of General Ideas in the Making and Conduct of Canadian Foreign Policy" (Ottawa, 2007), http://www.international.gc.ca/odskelton/stairs.aspx?lang=eng.
[133] Ibid.
[134] Alberts, David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*, P.83
[135] Martin Van Creveld, *Command in War* (Cambridge, London: Harvard University Press, 1985), P.5

Militaries in general and the CF in particular, have attempted to close this gap by creating entities which enable coordination at the tactical level. The Civilian-Military coordination (CIMIC) Teams,[136] represent such an attempt. Over the years, CIMIC teams have enjoyed irregular levels of success on deployments, mainly due to the lack of training and experience of the CIMIC personnel in dealing with civilian. But the situation has improved since the training put in place by diverse countries, including Canada, has brought the CIMIC personnel's knowledge up and their acumen in dealing with civilian actors has significantly improved. [137] However, these teams are perceived by many civilian organizations to be still far too imbedded within the military culture of C2 and their doctrinal approach too organized in a military manner to really close the gap. At best, they represent a point where some cooperation can be achieved. At worst, the civilian agencies, in particular the NGOs, will see them as an extension of the military and perceive CIMIC as an attempt to control their actions.[138]

Closing the Gap

The United States is using an approach similar to the WoG; they have experienced similar issues. The U.S. experience shows that traditional C2 doctrine is not particularly well-suited for this approach.[139]

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[136] Canada. Department of National Defence, *B-GJ-005-300/FP-000- Canadian Forces Operations*, P. 101
[137] Neil Joyce, "Civilian-Military Coordination in the Emergency Response in Indonesia," *Military Medicine* 171, no. 10, 2006, PP. 66-70; Carter L. Burgess, "The Armed Forces in Disaster Relief," *Annals of the American Academy of Political and Social Science* 309, Disasters and Disaster Relief (Jan., 1957), pp. 71-79, http://www.jstor.org/stable/1031936.
[138] OCHA, *Civil-Military Relationship in Complex Emergencies*, New York: UN, 2004
[139] Alberts, David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*; Alberts, David S., and Richard E. Hayes, *Power to the Edge: Command...Control...in the Information Age*, P. 83

Yet the US aims to improve the approach in developing better links and coordination means between the diverse actors. Post-operations recommendations focus mainly in the establishment of clear understanding of roles, capabilities and information needs among civilian and military actors, and the establishment of a more balanced C2 structure.[140] This approach is essentially based on the creation of relationship prior to an operation, thus becoming an alternative to the traditional C2 structure. The *structures* for a *joint civilian-military space* are established in advance. Indeed, as Alberts stressed these ―relationships with these actors are anything but military command relationships." [141]

While this approach is showing promise, it is a pragmatic reaction to issues experienced on operation. Yet precious few analyses of alternative approaches to command arrangements have been conducted, notwithstanding the discussion concerning de degree of centralization those arrangements would need. This, according to Alberts, is explained ―partly because C2 community research has been preoccupied with communications and computer systems, and partly because command has generally been understood as an art." Indeed, historically command structures migrated toward a more decentralized approach because of the complexity of the war fighting environment and the technological limits in communications,[142] not because of the implementation of a new doctrine such as the WoG approach. Yet, for the WoG approach in disaster relief operations, the requirements of command and control may transcend these limitations. What will be needed is perhaps found in Harrald's observations.

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[140] Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P. 6. 7
[141] Alberts, David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*, P. 63
[142] Ibid. P. 63

Harrald's paradigm

DIME, WoG and 3D are all concepts that describe a multifaceted approach. However, they are suffering from an inability to affect the very aspect that they try to achieve. At the same time as the emergency response community attempted to increase their ability to respond to disasters in a more normative, structured, coordinated manner, governments aimed to improve in a holistic manner the efficiency across the spectrum of the phases of disaster recovery.[143] Yet, according to Harrald, it is the description of the non structural factors such as improvisation, adaptability, and creativity that are critical to coordination, collaboration, and communication and to successful problem solving."[144] This identifies two specific dimensions that must be achieved to ensure the success of disaster reliefs operations: discipline and agility. [145]

From his research, Harrald proposed that "a catastrophic incident has unique dimensions/characteristics requiring that response plans/strategies be flexible enough to effectively address emerging needs and requirements."[146] He noted also three essential enabling themes aiming to cope with these dimensions while coordinating disaster relief operations.

First, he proposed that a trade-off must be done between the command and control requirements to mobilize a large organization and the need to ensure coordination and

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[143] Foreign Affairs and International Trade Canada, *Stabilization and Reconstruction Task Force (START): MOBILIZING CANADA'S CAPACITY FOR INTERNATIONAL CRISIS RESPONSE*, P. 5; Foreign Affairs and International Trade Canada, "How the Government of Canada Responds to Natural Disasters Abroad," http://www.international.gc.ca/humanitarian-humanitaire/faq.aspx (accessed 1/04, 2011).

[144] John R. Harrald, "Agility and Discipline: Critical Success Factors for Disaster Response," *Annals of the American Academy of Political and Social Science* 604, Shelter from the Storm: Repairing the National Emergency Management System after Hurricane Katrina (Mar., 2006), http://www.jstor.org/stable/25097791. P. 250

[145] Ibid. P. 256

[146] Next three paragraphs present Harrald's position: Ibid. P. 257

communication. Centralized, rigid command structures do not have the flexibility required is such demanding circumstances. The effort is done in the preparation phase of a deployment to ensure that all responders are aware of their limits, and where they can seek clarification. Flexibility is achieved by delineating the limits of the actors' respective ―space" and the identification of the desired outcome.

Secondly, the answer to the uncertainty typical to extreme events where circumstances create unforeseen problems, the organizations needs agility in the form of adaptation, creativity and improvisation. This underpins the freedom of action necessary for coordinating with other agents, or communication rights.

Finally, while flexibility and agility are necessary, respondents to crises are often spontaneous volunteers or emergent organizations. The absorption of this motley' crew and the achievement of interoperability can only be done by a common structure and process, both at the technical and operational level, in order to achieve convergence toward the objectives identified in the WoG approach.

So to be effective, the flow of information must be exchanged between diverse players. Those actors must be taken into account when planning for contingencies or alternative solutions are considered. In Alberts' words ―This broad set of relationships needed for success is more properly understood as *"command arrangements"* than as any relationship found in the military C2 literature." [147]

Is it possible to reconcile the *gap* from the WoG approach, by putting in place a command arrangement which would ensure flexibility and agility between actors, while

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[147] Alberts, David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*, P. 84; David S. Alberts, "Agility, Focus and Convergence: The Future of Command and Control," *The International C2 Journal* 1, no. 1 (2007), 1-30, http://www.dodccrp.org/files/IC2J_v1n1_01_Alberts.pdf (accessed 19/11/2010).

still ensuring the *joint civilian-military humanitarian space*? But the question is where and how to close it? There are specific resources within the CF that offer similitude with their civilian counterparts. For example, engineers, and medical personnel are qualified civilian practitioners, which gives them a special status when dealing with non-military agents. When the mission is to render medical aid to a population, the traditional distrust that exist between civilian and military is somewhat reduced. However, the military medical unit will need firstly to address the paradigm of agility and discipline before it can interact efficiently with its civilian counterparts. The creation of a command arrangement which would allow the medical units flexibility and agility whilst still keeping the necessary discipline level that would allow military actions to meet the WoG objectives may be the answer. But first, the conceptual model must be addressed. Perhaps a variation of Alberts and Hayes Command Model may help in enabling activities which will close this gap.

Conceptual foundation: The Alberts and Hayes' model

Alberts and Hayes researched the concept of C2 from every possible angle. They recognize that C2 must be understood as part of a unified role, but that defining the functions within the C2 approach and the context it interacts with is the foundation to understanding the approach.[148] The iterative analysis of dimensions, which in turn allows evaluating the C2's ability to meet the requirements of a mission, forms the basis of the approach.

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[148] Alberts, David S., and Richard E. Hayes, *Understanding Command and Control* (Washington, D.C.: Command and Control Research Program (CCRP), 2006), P. 81

There are four fundamentals this model. First the world is an open, complex system, naturally causing adaptation.[149] Additionally, the C2 terminology is redefined by Alberts and Hayes in three terms: *Agility*, *Focus* and *Convergence*. C2 is better explained by three resulting qualities: *agility*, or the capability of meeting the challenges caused by a complex world over a range of changing conditions and circumstances; *focus*, or the congruence of the command intent; and *convergence*, where the organization will define the guidance, and provide the means and capabilities to achieve the goals set.[150]While analyzing a different pattern of reaction, it is interesting to note that Harralds' three themes of Agility, Flexibility and Discipline are closely related to and reinforce this definition. The following figure shows how Albert and Hays model translates C2 into action:
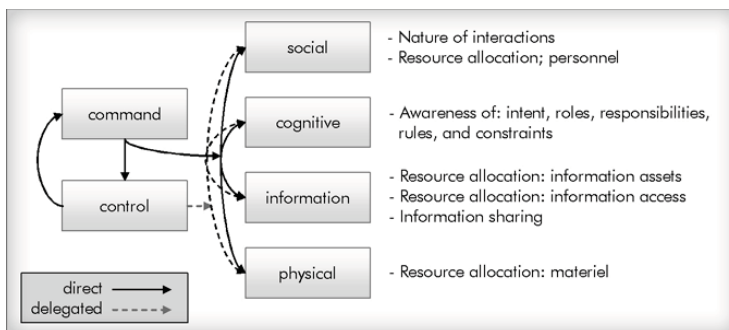

Figure 4: Command and Control as a function of Domain.[151]

As shown on the figure above, the C2 possesses four domains of interaction: physical, information, cognitive and social. So, to qualify the *agility*, *focus* and *convergence* of any C2 approach, three inter-related fundamental dimensions must be

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[149] Ibid., P. 27
[150] Ibid., P. 59
[151] Ibid., P. 60

analyzed by using indicators. Those allow assessing the ability to adjust the C2 approach, a necessary factor in disaster relief operations. These indicators are described as the allocation of *decision rights*; *patterns of interaction among the actors*; and *distribution of information*.

Finally, defining the essence of C2 is imperative since the freedom of action within the cadre can vary greatly.[152] While there is an evident need for freedom of action close to the *edge* in disaster relief operations, it imports not to allow it haphazardly. This invariably results in the dreaded ―mission creep" and would ultimately endanger the WoG approach to disaster relief operations. So the study of each C2 function is completed by identification and analysis of the domains using three key fundamental and interdependent factors.[153] The *allocation of decisions rights* will impact on the other two; together with *pattern of interactions* the *distribution of information* will be determined. The resulting distribution of decisions may cause further changes in the allocation of decision rights, thus forming a loop. This allows keeping the focus on the mission, but also creates agility in the utilization of resources, to meet the changes in the environment. Below is an example of how the factors interact:

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[152] Ibid., P. 9
[153] Ibid., P. 9
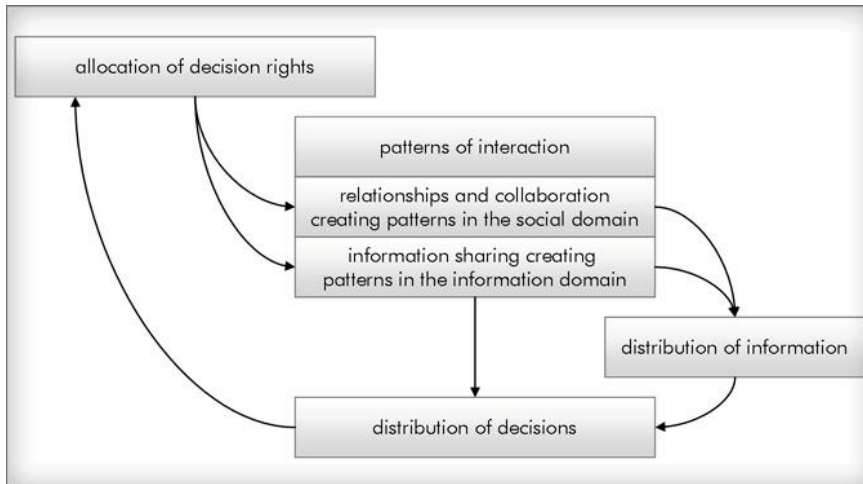
Figure 5: Three key dimensions of a C2 Approach.[154]

Once the three-dimensional space is observed and qualified, and the inter-relation between the three key dimensions are identified, of the given C2 Approach can be assessed in terms of agility, focus and convergence.[155] Its position within the space can then be translated and adjustments considered, as shown on the figure below:

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[154] Ibid., P. 81
[155] Ibid., PP. 73-74
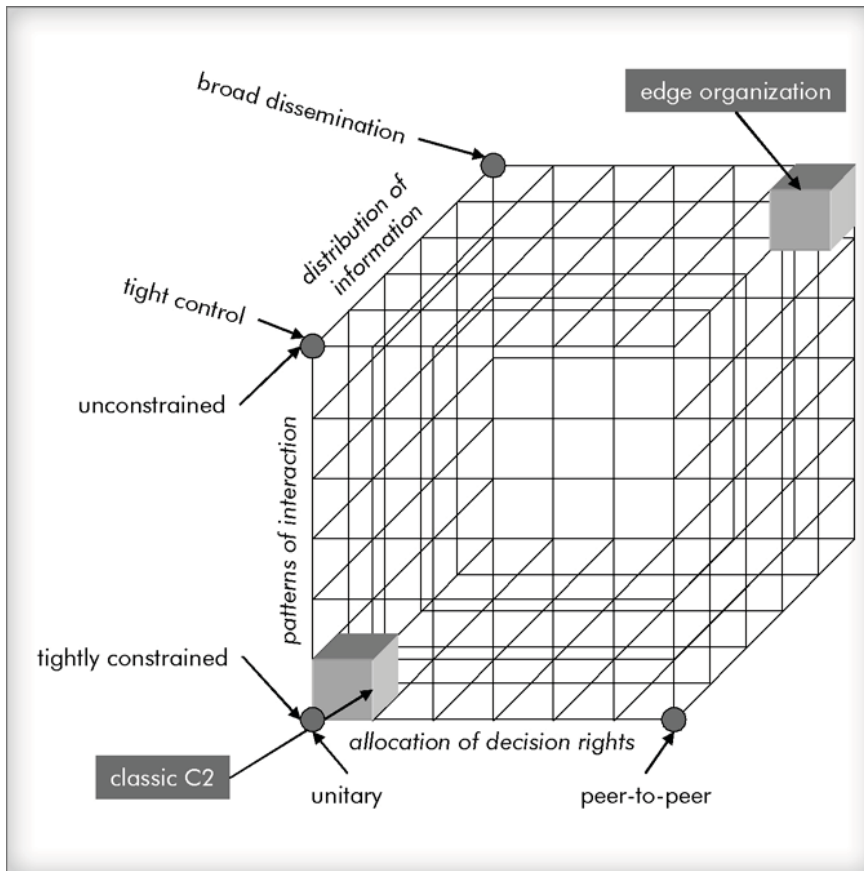
Figure 6: The C2 Approach Space.[156]

At first look, this model may be difficult to achieve on operations. It requires a constant surveillance and a capacity to adapt quickly to the rapidly evolving situations. It also presupposes that units will be capable, through their initial decision rights, to move toward the appropriate C2 arrangements. Indeed, as it is an iterative process, Harralds' paradigm of agility and discipline can be used as indicators of the success of the model. In good artillery terminology, agility and discipline become the quintessential double-check. But as traditional C2 arrangements such as the JTF explained in earlier chapters

[156] David S. Alberts, "Agility, Focus and Convergence: The Future of Command and Control," *The International C2 Journal* 1, no. 1 (2007), P. 17, http://www.dodccrp.org/files/IC2J_v1n1_01_Alberts.pdf (accessed 19/11/2010).

will more than likely still be in effect during future deployment, how can the Alberts and Hayes model be incorporated to its full extent?

Part of the answer lies already within the realm of possibilities, in the form of the concept of Mission Command. Another aspect to which the model must prescribe to is the application of some of the well known Principles of War, notably Interaction, Unity of Effort and Decisiveness. However, these principles need to be adapted to the conditions of a disaster relief situation. The following part will attempt to rationalize the model in a practical manner to be implemented as possible command arrangements for medical units in disaster relief operations, while still meeting the WoG approach.

The model of interactions: How does this fit with the WoG

Agility, focus and convergence are arguably already part of the CF command doctrine under the auspice of the concept of Mission Command. [157] However, the dimensions necessary to the analysis (decision rights, pattern of interactions and distribution of information) are unfortunately laid down at the onset of any operation, under the form of the organizational structure the JTF will take. Ideally enough flexibility in the form of personnel, communication resources and command relationship will allow

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[157] In One Canada One Army, P.16: Command is ―defined as the creative expression of human will necessary to accomplish a mission through the exercise of the authority vested by the national government and the chain of command for the direction, coordination and control of military forces. Mission command is the empowerment of soldiers and leaders to use their initiative, will and professional expertise to carry out all tasks and to operate independently within the commander's intent. It is a way of thinking that is to be pursued and practiced with vigour. Personnel, facilities and processes support the exercise of command. This grouping is known collectively as the command support system, a system that eclipses the previous commander-staff relationship. Furthermore, the traditional division between staff and signals is now being blurred through the effects of digitization." Canada. Department of National Defence, *The Force Employment Concept for the Army - One Army, One Team, One Vision (2005)*, P.16

adjustments when necessary.[158] However, in the present CF command construct this is extremely difficult to achieve. OPERATION HESTIA is the latest example of those difficulties, in the sense that the normal construct of a JTF does not have sufficient flexibility to enable the units to operate in the WoG concept in a flexible manner, by providing them with the necessary authority and initiative that is demanded in such an environment.[159] As presented above, the key to provide the flexibility needed resides in the application of principles of war.

In researching better solutions for C2 arrangements in PSO, Alberts proposed that realistic principles for PSO should be restated.[160] While disaster relief operations lie further to the left of the Spectrum of Conflict, these ―principles of War" can be employed as well. Thus, any C2 arrangements for a WoG approach should apply them. Those are found below:

> Unity of purpose;
> Consensus planning;
> Simplicity;
> Adaptive Control; and
> Transparency of Operations.[161]

In disaster relief operations, unity of purpose will be created and maintained by adopting a consensus planning approach. This enables the necessary interactions with the other actors participating to the WoG approach. This interaction allows identifying and

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[158] Art 0502 of CFJP 01 states that: ―To be effective, command should normally be decentralized to the greatest degree practicable in order to cope with the uncertainty, the disorder, the complexity, and the confusion that are usually present at the tactical level. Commanders must always make their intentions clear to subordinate commanders who, in turn, must make decisions on their own initiative based upon their understanding of the senior commander's intentions."

[159] Brigadier-General Joe Sharpe, in lecture, *Comparative Command; Op HESTIA: Command Challenge C/DS 542/PDM/SM-1*

[160] Alberts, David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*, P. 86

[161] Ibid. P. 86

understanding each other agendas relevant to the operation, and sets the conditions for building confidence within the group. Basically, it allows *focus* and *convergence* to occur, and somewhat closing the gap between civilian and military space.

Because of the difficulties related to the lack of mutual doctrine, different level of capability and training and cultural divergence, it is necessary to keep things simple. It makes it easy to keep clear objectives, thus ensures that a consensus can be built. But simplicity also allows defining procedures on which effective unity of purpose depends. In Harrald's terms, simplicity allows flexibility and discipline. He model presented depends on simplicity to ensure agility and focus.

The reactive nature of disaster relief operations impacts directly the last two principles. Adaptive control refers to the understanding the environment sufficiently well to develop possible future scenarios, and collecting and assimilating the information needed to develop the emergence of one of these futures. This allows taking the appropriate action to influence the events to accomplish the objective. Adaptive control presupposes the conception of contingency plans, which enable quick reactions to cope with major developments. It enables the leader to keep plans simple, thus permitting the continuation of consensus planning and preventing ad hoc planning. Transparency of operations, allows framing the area of operations to prevent surprise actions. It minimizes uncertainty, and affects directly the first three principles by thus creating a zone of comfort between all actors.

Those principles compare favorably against the CF five tenants pertaining to the concept of Mission Command: unity of effort, decentralized authority, trust, mutual

understanding and timely and effective decision making. [162] It would be easy for a layperson to ask ―why change?‖ Indeed, when applied properly, the concept of Mission Command could be successful in the WoG approach. Yet two issues stands directly from the very nature of C2.

First, Albert‗s principles are not in contradiction with Mission Command; they merely validate how the concept of C2 and Mission Command can be applied in a disaster relief environment. The C2 model of Agility, focus and Convergence and its three dimensions also relate to the application of Mission Command. This demonstrates the validity of the C2 construct. But in order to amend the traditional C2 arrangements, it is necessary to go beyond the existing concept and change the structure of the organization; after all, the other actors are not part of the military structure.

Secondly, Mission Command is a philosophy within manoeuvre warfare which presupposes that the intent of the commander is clear, the responsibility to fulfill that intent is accepted and that decisions will be taken in a timely manner. Mission Command also ―requires a style of command that promotes decentralized decision-making, freedom and speed of action and initiative.‖[163] Those are again easily understood within Albert‗s C2 model. Yet again it is in the application of the principles cited above that Mission Command has the best chance of succeeding in a WoG approach, as they are better fitted for dealing with civilians which may not understand the military culture.

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[162] Canada. Department of National Defense. B-GL-300-003/FP-000 *Command,* P. 3-6; Canada. Department of National Defence, *B-GJ-005-000/FP-001, CFJP-01, Canadian Military Doctrine*; and Canada. Department of National Defence, *BG-04.002E - Canadian Forces Disaster Assistance Response Team*
[163] Canada. Department of National Defence. B-GL-300-003/FP-000, *Command* (Kingston: Directorate of Army Doctrine Canada, 1996), P. 3-6.

Yet the CF, as an organization, tends to limit both the ability to espouse the Albert's and Hayes C2 model and the projection of Mission Command by adopting a traditional command structure. Canadian Forces Joint Publication (CFJP) 01 cautions to keep the balance between delegation and direction and —the impact that tactical decisions can have on strategic outcomes." [164] This does little for empowering subordinate units and commanders in dealing with civilian organizations. Since the JTF are by nature mission specific, an appropriate delegation of specific decision rights and the application of the principles presented above should be part of the normal planning during pre-deployment. It can be argued that these decision rights and the agility, focus and convergence can be accomplished within the application of the CF operational functions, more specifically the Act function.[165] The next part of this chapter will try to elaborate how the model can be employed in the deployment of a Medical Unit during disaster relief operations.

Defining the CF HSS units' employment in a manoeuvre role

> Act integrates manoeuvre, firepower and offensive information operations to achieve a desired effect and end-state through the synchronized application of the entire array of available capabilities, both lethal and non-lethal. The concept is relevant across the continuum of operations, from domestic and humanitarian missions to combat.[166]

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[164]   CFJP 01, Chap 05 art 0503: —Command structures must always take into account the delicate balance between delegation and direction. Although freedom of action and application of initiative are encouraged, they must be balanced with an appropriate sense of responsibility and accountability. Modern communications present commanders with two challenges: the temptation for higher levels of command to micromanage operations at lower levels; and the risk of relying too much on communications systems, which may stifle initiative. The best response to this dilemma is to encourage initiative at the lower level of commands but provide appropriate, clearly articulated, unambiguous guidance to commanders to ensure that the higher level commander's intentions are well understood and not open to interpretation. Given the immediate impact that tactical decisions can have on strategic outcomes, achieving the right balance is essential to campaign success." Canada. Department of National Defence, *B-GJ-005-000/FP-001, CFJP-01, Canadian Military Doctrine.*
[165]   Canada. Department of National Defence, *The Force Employment Concept for the Army - One Army, One Team, One Vision (2005)*, P. 13
[166]   Ibid. P. 24

While the definition above discuss mainly of the integration of actions specific to kinetic action, Act is the application of effects to achieve a desired end state. In this sense, it is entirely possible that, in HOs for example, *firepower* is replaced by other type of activities, such as the provision of medical services. It will depend entirely on what the mission is, and the definition of the lines of operations related to the mission's objectives. Act provides the means to transform desire into results, through the planning, coordinating and executing of the employment of resources.[167] Act also presupposes that the manoeuvre elements will possess the decision rights, and the authority to interact with both the supported and supporting elements in such a way to achieve the desired effect. And indeed those units will receive appropriate information rights to help in defining a clearer picture of the situation, in order to react accordingly.

HSS units are not considered as manoeuvre elements, nor should they be in most cases. Their role is that of a supporting element in most cases, as their primary mission is to provide medical treatment to the troops. So the place attributed to them within the JTF command structure is appropriate in most case within the spectrum of operations. Therefore, HSS units in their primary role will normally not operate in an environment where the traditional C2 arrangements will not apply. Yet during disaster relief operations, it is entirely possible that a primary mission or the main effort *is* the medical treatment of civilians, for example during catastrophic epidemics or earthquakes. Then, the traditional C2 arrangements as discussed in chapter three impede on the ability to take the appropriate actions to the benefit of the mission. Going from a *supporting* to a

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[167] Ibid. P. 24

supported role, the HSS unit will therefore need to be allowed the same conditions or rights that a manoeuvre element would receive.

As discussed above, manoeuvre elements will plan, coordinate and execute their actions with all the other elements supporting them. In a WoG approach, they possess, through C2 arrangements, more flexibility to decide, sensibly better leeway in patterns of interaction and access to information, both with civilian and military. This allows the manoeuvre unit to meet the tenant of agility, focus and convergence with more ease, thus plainly contributing to the overarching mission. So if the main effort becomes the medical care of a local population affected by some catastrophic event, the HSS Unit must be allowed the freedom that manoeuvre units enjoy.

Summary

This chapter discussed the conceptual foundation of a model which may help in correcting identified HSS units issues during disaster relief operations. It defined the gap in the WoG as being the inability of the system to create a *joint civilian-military humanitarian space*. Closing the gap can be done by a tailored C2 system where all players buy-in. This is however further complicated by the need to coordinate operations in a flexible, agile while disciplined manner.

By applying the Alberts and Hayes C2 model of agility, focus and convergence, it is possible to provide actors with sufficient decision rights, appropriate patterns of interactions and appropriate distribution of information to close the gap. However, since HOs are different than other operations, any C2 construct must take into consideration the

principles of: Unity of purpose; Consensus planning; Simplicity; Adaptive Control; and Transparency of Operations. A Parallel was drawn between those principles and the principles of Mission Command, clearly demonstrating the ability of the model to be applied during the analysis of a C2 construct. Within this model, HSS unit can be employed efficiently in the current CF doctrine if the command structure accepts to allocate the same rights (decision, interactions and information) to the HSS unit as they would to a manoeuvre unit.

Chapter 5: Analysis - Issues related to the model:

This chapter will review the findings of the research; identify the issues at hand and the steps to be taken to improve future research. It will conclude by proposing recommendations to improve the efficiency of the HSS units during disaster relief operations.

C2 Model of interaction

The last chapter discussed the conceptual foundation of a model which may help in correcting identified HSS units issues during disaster relief operations. It defined the gap in the WoG as being the inability of the approach to create a *joint civilian-military humanitarian space*. Closing the gap can be done by a tailored C2 system where all players can buy-in. This is however further complicated by the need to coordinate operations in a flexible, agile while disciplined manner.

The Alberts and Hayes' C2 model of agility focus and convergence requires providing actors with sufficient decision rights, appropriate patterns of interactions and appropriate distribution of information to close the gap. A parallel was drawn between those principles and the principles of Mission Command, clearly demonstrating the ability of the model to apply in the analysis of a C2 construct. Within this model, HSS unit can be employed efficiently in the current CF doctrine if the command structure accepts to allocate the same rights (decision, interactions and information) to the HSS unit as they would to a manoeuvre unit in the field.

The Whole of Government Gap

DFAIT seeks to ―encourage a whole-of-government Canadian response that is timely, coordinated, and coherent and focused on meeting relief and recovery needs in support of affected governments." [168] But Stairs contents that this comprehensive approach to operations is too static to face the fluctuation of a rapidly changing situation on operations. For him, the approach lacked the capability to integrate the process and the communication of information. The result is that the efforts lag behind the aim thus defeated the purpose of the approach.[169]

Yet the WoG has enjoyed relative success during OPERATION HESTIA, specifically in providing relief to civilian, albeit in a haphazard way. This was largely due

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[168] Département des Affaires Étrangères et Commerce International, *Une Politique Étrangère Par Les Canadiens* (Ottawa: DFAIT, 1995), http://www.dfait-maeci.gc.ca/foreign_policy/cnd-world/menu-en.asp.; foreign Affairs and International Trade Canada, *How the Government of Canada Responds to Natural Disasters Abroad*; Canada. Department of Foreign Affairs and International Trade,
" Humanitarian Affairs," Ottawa, http://www.international.gc.ca/humanitarian-humanitaire/index.aspx (accessed 03/30, 2011).DFAIT from http://www.international.gc.ca/humanitarian-humanitaire/faq.aspx
[169] Stairs, *The Menace of General Ideas in the Making and Conduct of Canadian Foreign Policy*

to the efforts deployed by the three main governmental actors (DFAIT, CIDA and DND) to cooperate and collaborate in the planning and execution of the DRO. The creation of START allowed the elaboration of a strategy of intervention which was following the spirit of the WoG approach. However, anecdotal evidence showed that this not necessarily translated at the tactical level by a complete integration of the activities. The *joint civilian-military humanitarian space* necessary for the integration to be achieved did not clearly appear.

Yet because OP HESTIA is relatively recent, little public information is available on the detail to which the gap could be confirmed without any doubt. There will be an opportunity to confirm this posit with greater clarity through a qualitative assessment and a complete empirical analysis once data and documents concerning lessons are made available. For example, it is entirely possible that the poor access to computers and communication systems[170] prevented appropriate information sharing and coordination. Thus better C2 systems may be the means to close the gap.

Nevertheless, examples such as the late arrival in-theatre of the Field Hospital as discussed in chapter 3 and its subsequent static location resulted in incapability to close the WoG Gap. It may have been possible to lessen the Gap through CIMIC's efforts. However, there is sufficient evidence to identify the major issue of the WoG approach as the difficulties for horizontal organizations to coordinate actions without an appropriate C2 construct. The negative effects on the transportation system that the departure of the CF control systems from Jacmel brought the relief efforts to a standstill. This indeed

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[170]   At the beginning of the operation, the main means of communication was by Blackberry system. The sheer amount of communications by cellular phones and Blackberry systems utilized by all actors in theatre crashed the already weakened communications structure of Haiti.

brings Albert's position in light: ―planning must be forward-looking and identify contingencies, ―trigger" events or situations, and appropriate reactions before the fact."[171]

Interactions with other actors in disaster relief operations

The interaction between actors in disaster relief operations resides solely on information sharing.   Cooperation, centralization and integration cannot be achieved without it. This influences directly the Gap discussed above. Civilian participants will share information more easily within each other than with the military. The reverse is also true. [172]

Yet, for Wentz it is clear that HOs could benefit if ―both military and civilian responders contributed and shared information needed in the humanitarian space. What is required is a protocol for providing information that does not compromise the goals of the overall humanitarian effort."[173]

Most of the actors are pragmatic. So the key to success in a greater integration may be to provide a forum where the exchange of information can flow freely, and that the different character of each NGO is recognized and respected.[174] CIMIC's activities can set the conditions for such a positive forum. However, specialist groups such as

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[171] Alberts, David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*, P. 58

[172] Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P. 26; See also B. Adivar and A. Mert, "International Disaster Relief Planning with Fuzzy Credibility," *Fuzzy Optimization and Decision Making* 9, no. 4 (Dec, 2010), P. 413 http://proquest.umi.com/pqdweb?did=2192360091&Fmt=7&clientId=1711&RQT=309&VName=PQD.; *The Effectiveness of Foreign Military Assets in Natural Disaster Response* (Sweden: Stockholm International Peace Research Institute,**[2008]**)**;** and Harrald, *Agility and Discipline: Critical Success Factors for Disaster Response*, PP. 256-272

[173] Wentz, *An ICT Primer Information and Communication Technologies for Civil-Military Coordination in Disaster Relief and Stabilization and Reconstruction*, P. 28

[174] Ibid. P. 28

medical practitioners often need face-to-face time with their counterparts. So military medical personnel must be allowed to participate to such forum, and must have the authority to decide on how best participate in to the coordination with the other actors. For example, a daily coordination meeting was held with the NOGs and IOs in Haiti. This would have been a perfect time for the medical personnel to exchange information with their civilian counterparts regarding the flow of patients, the areas that still needed coverage, the health hazards such as potential epidemics, and health situation in refuge camps. Only then can the medical unit truly contribute to the comprehensive approach to the Canadian intervention in disaster relief operations.

Another aspect that the Canadian Health Services may want to consider would be to participate to humanitarian aid mission in the cadre of exercises as their British and American counterparts execute.[175] Indeed, during these exercises, a big part of the efforts, pre-deployment, during the mission and post-deployment concentrates on coordination with the civilian actors, including DFAIT and CIDA.

This experience allows medical personnel to learn how CIMIC works. It also permits a better understanding of their, and the civilian actors' culture. It also creates ties with some groups who may deploy in the location of future disasters. By creating a common understanding and nurturing ties with those actors prior to the HOs, it would be easier to participate to the forum discussed above. This would then allow the HSS unit to interact appropriately and have a direct effect on the medical situation at hand.

As well, since during these exercises the HSS units are the *supported units*, it creates an opportunity to educate the other CF elements on what the HSS is truly capable

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[175] *African Killers: Exercise SHARP POINT*; Army News Team, *African Killers*; see also Major Jones, *Military Medical Humanitarian Response for Civilian Disaster, War and Military Operations Other than War*, PP. i-33.

to achieve. It's a little late to start educating the Chain of Command when flying toward the site of the disaster.

According to Alberts and Hayes, success in HOs can be qualified when the creation of directives and the submission for assistance from actors who are not subject to military command can be coordinated. But these directives must reflect the planning process and be simple. They also must have the desired impact on the situation. [176] This needs to be evaluated carefully; perhaps there is a need to amend the CIMIC doctrine to reflect this posit.

Health Services Units: Systemic issues

HSS must be capable to provide medical support as seen fit to meet the global objectives of a campaign, at any point of the Spectrum of Conflict. To this end, the primary objective is to conserve the fighting strength of the supported force.[177] Because of this very nature and primary function, HSS Units have traditionally been relegated to a support role. Since it is their primary mission, the traditional C2 construct is not necessary bad.

However, when the mission becomes medical and there is a moral obligation to provide appropriate support in the humanitarian arena if aid is not provided by somebody else,[178] in other words when the TF is deployed with one of the main lines of operation

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[176] Alberts, David S., and Richard E. Hayes, *Command Arrangements for Peace Operations*, P. 85
[177] Canada. Department of National Defence., *B-GJ-005-410/FP-000 Joint Doctrine HSS Support to Operations,* P. 1-5
[178] Ibid; See also NATO's Joint Analysis and Lessons Learned Centre, *Medical Civil-Military Interaction,* JALLC Report JALLC/CG/10/152 16 July,[2010]); and Hawley, *Rwanda 1994: A Study of Medical Support in Military Humanitarian Operations*, PP. 75-82

being to render medical aid to civilians, this traditional construct becomes too constraining. The HSS units cannot achieve Harrald's agility in decision making, flexibility in rendering treatment and discipline in the form of coordination with the civilian agencies. Using the Alberts and Hayes C2 model of Agility, Focus and Convergence, it was determined that when HSS units are deployed in a scenario where medical aid to civilians is part of the main effort, they need the same decision rights, interactions authority and access to a distribution of information as a manoeuvre unit. This would open the means of communications necessary to interact with civilian actors, and act in the manner to meet the requirements of the WoG approach. The experiences of OPERATION PASSAGE and OPERATION HESTIA, as discussed earlier, have showed the importance of having these rights well established. However, there is a need to further research using the same model to collect empirical and qualitative data.

The easiest way to achieve this is to put HSS units under the same umbrella as a manoeuvre unit within the task force. The HSS unit becomes then a *supported* vice being a *supporting* unit. It would be capable to achieve the desired effects of its line of operations by acting in the purest sense of *mission command* to meet the WoG concept. This would enable command and control of the medical situation through coordination and synchronization of efforts with the civilian counterparts; this interaction ensuring flexibility in planning and agility in decision making and execution. However, the Canadian experience in medical deployment as a stand alone entity is limited. Indeed only once since the Korean War did a HSS unit deploy as the main contributor. This is perhaps due to the fact that Canada did not necessarily deploy in missions where the medical needs were such that HSS deployment was warranted. Perhaps further analysis

of the British and American experience during their deployments in Kenya and Vietnam, using the C2 model, could be of use.

The Rwanda experience lead to the creation of a force package: the DART. While proven to be efficient on deployment, the traditional C2 structure was employed, relegating the HSS sub-unit into a sub-unit role, lacking the authority to act independently. During OP HESTIA, the Field Hospital was not under the Support Group, but was not afforded the same rights as those of a manoeuvre unit. Their late deployment and the lack of a C2 element meeting current HSS doctrine compounded this inability. It can be argued that 1 Canadian Field Hospital was still a supporting unit; the population they treated just changed.

Propositions

The Alberts and Hayes' C2 model of interaction was validated by using the tenets of Mission Command. It has proven a useful qualitative tool to confirm that HSS units should be allocated the same rights as those of a manoeuvre unit when time to act within a HO construct. However, further studies must be completed, perhaps using empirical methods, to refine the model. Without an exhaustive study of the interaction and their fluctuations through the C2 model, it is difficult to translate it in the real world.

The WoG gap was identified as being the inability of the system to create a *joint civilian-military humanitarian space*. Closing the gap can be done by a C2 system, tailored to the mission at hand where all players can buy-in. Because the approach is relatively new, there is not much information to propose an evidence-based solution. A

qualitative assessment of lessons learned and action taken to improve the approach may be necessary. In the meantime, the elaboration of Standard Operation Procedures to bring commonality of language in effect vice a similar culture between the main actors may prove helpful. Secondly, information sharing systems and means of communications must be standardized to ensure the freedom of the information flow. But first and foremost, a common definition of the WoG approach form all participants must be accepted.

The ability to interact with NGOs, IOs and OGDs resides solely on information sharing. The principles Cooperation, centralization and integration cannot be achieved without it. CIMIC is a fairly good tool at the tactical level to implement the task forces objectives on operations, and reduce the WoG gap. Responsibilities to create an open forum where cooperation occurs must be given to the CIMIC teams. But cooperation is the lowest common denominator; the aim should be integration. To help improving coordination, CIMIC must adopt two criteria of success: Are directives being created in a cooperative way? And do actors not under the military rule request assistance? As well, doctrine and TTPs must be amended to allow specialists such a medical personnel to participate to such forum, and those must have the authority to decide on how best participate in to the coordination with the other actors.

Finally, during a disaster relief operation, HSS units must be afforded the same rights as those of a manoeuvre unit. This would allow greater agility and focus, and would result in a better convergence of efforts toward the accomplishment of greater synchronization of effort between the military and the civilians. This would result in a better coordination with civilian counterparts and ensure successful execution of medical

aid. Since task forces are mission specific, there is no need to reconstruct a new C2 structure. All that is needed is to move the HSS units out from under the support group, and consider it as a manoeuvre unit. So in disaster operations, HSS units would be capable to interact with their civilian counterparts, elaborate the type of support they would provide, identify and receive the resources they need from other military elements, including transport, communications, logistics and security assets, and act within the AOR on all aspects related to health and the provision of medical support to the civilian population. They would be entitled to move medical assets to and from other units to support their objectives. They would be responsible for the elaboration of the planning and the coordination of the effort, for example outreach programs.

Chapter 6: Conclusion

This paper argued that to effectively be employed during humanitarian assistance missions, the CF Health Services units deployed must be allocated the same rights as a manoeuvre unit.

The research aimed at defining the conditions which would demand, or allow, the Health Services units to serve as manoeuvre units on operations. While very little research has been done on the contribution of military medical units in case of support to disaster relief operations, over the last several Canadian deployments, the HSS units were not performing in an optimum manner. Much had to do with an inability to coordinate medical relief with the civilian agencies and actors on the ground. In the concept of the Whole of Government approach, integration was not accomplished. So if one of the lines

of operations *is* medical relief, would treating the medical unit as a manoeuvre element help in maintaining a certain foreign policy posture, and facilitate building a collaborative environment, where civilian and military actors alike could pursue a positive outcome?

The research showed that it exist within the Whole of Government approach a gap, which can be summarized as an inability to set the conditions to create a joint civilian-military humanitarian space, where actors would collaborate in the betterment of the delivery of aid. Various reasons were explored; potentially the need of a comprehensive analysis through lessons learned process will help in developing principles which, once applied as best practices, will affect a collaborative attitude with the actors. Closing the gap could be done by using a tailored C2 system where all actors can buy in.

The model used to define the conditions was the C2 Model of interaction designed by Alberts and Hayes. The model proposes that to be capable of adapting to a complex environment, Command and Control structures must 2 possess agility and focus, which in turn will allow convergence toward the comprehensive aim. If actors are provided sufficient decision rights, appropriate patterns of interactions and suitable distribution of information, they will be able to operate in the environment and adapt to changes in the situation. This would result in a capacity to cooperate with actors out of the usual command structure, and close the Whole of Government ̶gap". The analysis of the concept and principles of Mission Command demonstrated the ability of the model to serve as a tool for analysis. Within this model, HSS unit can be employed efficiently in the current CF doctrine if the command structure accepts to allocate the same rights (decision, interactions and information) to the HSS unit deployed within a JTF as they

would to a manoeuvre unit. The Task Force Surgeon, for example, would be more than an advisor; he/she would be in a position to command HSS troops within the AOR.

However, without an exhaustive study of the interaction and their fluctuations through the C2 model, it is difficult to translate it in the real world. Further research may be promising by using a medical unit as test, during Joint Task Forces type exercises.

Recommendation

Because the Whole of Government approach is relatively new, a qualitative assessment of lessons learned and action taken to improve the approach may be necessary. This will allow the drafting of Standard Operation Procedures to bring commonality of language by standardizing communications, and the understanding of the concepts of the WoG.

As for the issue of the employment of the HSS unit in disaster operation, it is recommended that the CF operational doctrine be amended to allow the JTF commander, to consider HSS units as manoeuvre units, once a strictly medical strategic line of operations has been established. The HSS transits then from a supporting role into a supported one. Since the CF understands that tasks forces structures are mission specific, it is more a change of vision than a complete restructure that is necessary.

However, the CF Health Services Group should also consider amending its own doctrine, as well as develop medical exercises based on the ―SHARP POINT‖ scenario, in order to test further the ability of HSS unit to perform in a manoeuvre role, to expose

medical personnel to civilian aid agencies at the tactical level and to develop procedures that will allow agility, focus and convergence.

Finally, as the CF Health Services are under going an operational review, careful and thorough consideration must be given to allocate the right capacities in its field units. 1 Canadian Field Hospital could become the main effort for reaction to disasters. It is recommended that this unit become ―the manoeuvre" unit of the CF Health Services Group, and be given the tools to do so. Further analysis at the tactical level to find the right packaging must be done.

In conclusion, much of disaster relief operations is about health: preventing death and restoring well-being after the disaster struck. In order to contribute better in the comprehensive approach to intervention, The Whole of Government approach must include a proactive, flexible and agile Health Services component.

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