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HUMANITARIAN ASSISTANCE AND DISASTER RELIEF OPERATIONS: OP HESTIA REVISITED

Maj JP Landry

JCSP 44

PCEMI 44

SERVICE PAPER

ÉTUDE MILITAIRE

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Maj JP Landry

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Word Count: 2566

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AIM

1. The aim of the service paper is to demonstrate that humanitarian support provided by the Royal Canadian Air Force (RCAF) during Operation HESTIA (the Canadian Armed Forces (CAF) response to the earthquake in Haiti in January 2010), will remain a central feature of the current and future operational environments. Thus, this document will suggest that humanitarian assistance and disaster relief (HADR) operations should be recognized as a core role within RCAF doctrine. Further, HADR operations can only be accomplished with effective coordination and communication with Other Government Departments (OGDs) and Non-Government Organizations (NGOs). These relationships are crucial to the success of future HADR operations. This paper will provide a recommendation for future initiatives, training and doctrine associated with HADR. However, detailed analysis with respect to implementation processes will not be dealt with in this document and are beyond its scope.

INTRODUCTION

2. The RCAF's vision is: "An agile and integrated air force with the reach and power essential for CAF operations."¹ Developed from the RCAF capstone document, "Air Force Vectors", this initial overarching direction proposed for the RCAF is clear. The second vector, "Integrated", further describes the importance of being interoperable within the air force, the

¹Department of National Defence, A-GA-007-000/AF-008, *Air Force Vectors* (Ottawa: DND Canada, 2014), 34.

CAF, and with other allies. This vector highlights the importance of advancing the joint, interagency, multinational and public (JIMP) concept through “a wide variety of security partners as part of an integrated CAF and whole of government (WoG) approach for humanitarian and conflict operations.”² The RCAF Future Concepts Directive further states: “Concepts and capabilities should be developed that integrate air operations planning and execution as well as decision-support tools with OGDs, NGOs, and other supported agencies.”³ Unfortunately, to date, no significant progress has been made to integrate HADR operations into these philosophies. HADR is not featured as a core role within RCAF doctrine and thus has not developed as well as its warfighting counterparts.

3. As part of the analysis, this paper will first examine the trend of increased usage of RCAF assets for HADR operations both domestically and internationally. It will further examine potential reasons for this trend continuing in the coming decades. Additionally, this document will discuss some of the lessons learned during Op HESTIA, and how they are still relevant in today’s context. The next section will expand on the importance of formally adding HADR operations to RCAF doctrine along with the potential impact on future training and readiness. Lastly, this paper will propose a renewed focus on HADR operations through doctrine development and increased engagement with OGDs and NGOs as part of HADR exercises and training.

²*Ibid.*, 37.

³Department of National Defence, *Future Concepts Directive Part 2: Future Air Operating Concept* (Ottawa: DND Canada, 2016), 27.

DISCUSSION

Increasing trend of HADR operations

4. The CAF Future Security Environment 2013-2040 publication identifies areas for consideration in the coming decades that will impact global peace and security including environmental and social trends. The impacts of factors such as climate change, decline of food and fresh water resources, energy resources, migration and population displacement, global population increase, urbanization, disease and pandemics, etc, can be considered individually, but it is the combined impacts of multiple factors in the coming years that will be the most likely causes of future HADR operations.⁴ The United Nations Office for Disaster Risk Reduction has compiled data since 1980 demonstrating that disasters associated with extreme temperatures have been slightly increasing over time, but the more significant statistic is the 200-300% increase in flood and storm related disasters over the last 35 years.⁵ The RCAF's Projecting Power: Canada's Air Force 2035 document concludes that this increase in natural disasters will result in the increased use of rapidly deployable air force assets to provide humanitarian assistance.⁶

5. A review of the employment of RCAF assets both domestically and internationally for HADR operations over the last decade has confirmed an increasing trend. From the airlift of the Disaster Assistance Response Team (DART) (Haiti 2010, Philippines 2013 and Nepal 2015), to air transport and intelligence, surveillance, and reconnaissance (ISR) related missions for

⁴Department of National Defence, *The Future Security Environment 2013-2040* (Ottawa: DND Canada, 2016), 43-52.

⁵United Nations Office for Disaster Risk Reduction, "Disaster Statistics," last assessed 30 January 2018, <https://www.unisdr.org/we/inform/disaster-statistics>

⁶Department of National Defence, *Projecting Power: Canada's Air Force 2035* (Ottawa: DND Canada, 2016), 10.

domestic tasks as part of Op LENTUS, air assets have been used more often in HADR related capacities in the past ten years than in previous decades. The increase in the operational tempo of RCAF personnel for HADR related tasks demonstrates that these types of taskings are no longer occasional in nature; instead, they have become quite regular.

6. The current Government of Canada (GoC) Defense Policy Report “Strong, Secure, Engaged” (SSE) states that one of the eight core missions of the CAF is “Provide assistance to civil authorities and nongovernmental partners in responding to international and domestic disasters or major emergencies.”⁷ The current GoC has demonstrated intent to use RCAF assets for HADR operations and it is likely that subsequent governments will do the same given its positive psychological effects and the potential increase in national soft power through expeditionary HADR operations.⁸ Given air power’s characteristics of speed and reach, it is reasonable to assume that the RCAF will continue to be the tool of choice for these types of missions in the future.⁹

Relevant lessons learned from Op HESTIA

7. Operation HESTIA resulted in a large amount of lessons learned. Many of the command and control (C2) related issues have been addressed by the creation of Canadian Joint Operations Command (CJOC) in 2012, the establishment of 2 Wing, the RCAF’s air expeditionary wing in

⁷Department of National Defence, *Strong, Secure, Engaged: Canada’s Defense Policy* (Ottawa: DND Canada, 2017), 82.

⁸Richard Goette, “The Positive Psychological Effect of Air Power,” *Royal Canadian Air Force Journal* 1, no. 1 (Winter 2012): 82-83.

⁹Department of National Defence, *B-GA-400-000/FP-001. Royal Canadian Air Force Doctrine* (Ottawa: DND Canada, 2016), 14.

2014, and the RCAF's refinement of Air Task Force (ATF) concept and its associated doctrine. C2 remains very relevant in today's context but it is not the focus of this paper.

8. One of the main themes of the lessons learned from Op HESTIA is the importance of coordination and effective communication. The need for coordinated efforts during HADR operations is vital and when done effectively, saves lives. One challenge inherent to HADR operations is that airlift demand far exceeds the availability and the coordination of the limited airlift needs to be an area of focus across all levels. The final tour report from the Canadian Joint Task Force Haiti Commander (JTFH Comd), Brigadier-General Guy Laroche notes: "Throughout the deployment it was a daily challenge to control the load priorities established by the JTFH Comd as numerous players established their personal priorities that often conflicted and exceeded cargo capacity offered by the airlift."¹⁰ The fact that the commander in theatre had less situational awareness than the planning staff in Ottawa on the cargo loads entering theatre is a result of a lack of coordination and communication between staffs. Appropriately ranked and experienced liaison officers (LO) in key planning and operation centers during high intensity and time sensitive operations helps alleviate many of these issues.¹¹ This lesson is still relevant today as any response to a natural disaster will require timely coordination and effective communication in order to achieve the desired effects.

9. The previous paragraph focused on internal communications and coordination within the RCAF and the CAF, but international HADR operations also require effective communication and coordination with non-military agencies. This ability for military forces to become

¹⁰Canadian Joint Task Force Haiti, *End of Tour Report Op Hestia*, 21 March 2010, 2-3.

¹¹*Ibid*, 8.

integrated and interoperable with OGDs and NGOs during HADR operations is a key to the overall success of the mission.¹² The Op HESTIA end of tour report highlights the importance of having LOs with United Nations (UN) and United States (US) Armed Forces staffs. The report also noted an important deficiency: “Interagency collaboration is a key element at the tactical level however at the operational planning level there remains a gap between the CAF, CIDA and DFAIT.”¹³ An established and effective operational level relationship between the CAF and Global Affairs Canada (GAC), the government body that now has the combined CIDA and DFAIT mandates, is critical for any future HADR operations. For a truly WoG approach, the CAF and GAC need to establish more than the current practice of a temporary exchange of LOs between CJOC and GAC, but establish a process by which planning staffs can be brought together to coordinate both military and non-military efforts. From the RCAF perspective, this premise is in line with the guidance from the sections of *Strategic Vectors* and the *Future Concepts Directive* mentioned in the introduction of this paper and needs to be championed by the strategic and operational level leaders of today in preparation for future international HADR operations. Operational level staff training exercises would develop the integration between CJOC and GAC, and permit refinement of plans and processes prior to the next major HADR event.

10. Along the theme of coordination and communication, the importance of being able to effectively share digital information is a significant challenge in HADR operations as host nation infrastructure is typically damaged. Members of the air component during Op Hestia resorted to operations using BlackBerry devices and host nation cell phones until a more robust suite of

¹²Michael Whiting, “Military and Humanitarian Cooperation in Air Operations in Haiti,” *Humanitarian Exchange*, no. 53 (February 2012), 36-37.

¹³Canadian Joint Task Force Haiti, *End of Tour Report Op Hestia*, 21 March 2010, 8.

military communications could be established. The lack of traditional “chats” resulted in a reduction of situational awareness at multiple levels, decreased productivity, and less effective coordination of the relief efforts.¹⁴ Similarly, the US deployed various ISR aircraft to Haiti in support of relief efforts which provided essential information regarding the situation on the ground but they lacked an interoperable digital framework to effectively share the images and video with other countries, agencies and stakeholders.¹⁵ As the RCAF continues along the path towards acceptance of the new fixed-wing search and rescue aircraft and the procurement of medium altitude remotely piloted systems in accordance with SSE, it needs to establish the digital communication networks required to facilitate the sharing of imagery within the CAF and externally to OGDs and NGOs as part of an integrated system.¹⁶ The use of these new aircraft in future domestic exercises where OGDs and NGOs are participating will assist in the development of inter-agency digital information sharing processes.

The need for the HADR in RCAF doctrine

11. One of the first principles of Canadian military doctrine is that “Doctrine is developed in the context of contemporary and emerging factors that influence the way that Canada intends to use military force.”¹⁷ There has been regular use of RCAF assets in HADR operations both domestically and internationally and with the publication of SSE, the GoC clearly intends to continue this practice. Given that HADR operations are the current reality of the CAF, and combined with the GoC intent for future force employment, it is reasonable to conclude that

¹⁴Canadian Joint Task Force Haiti, *End of Tour Report Op Hestia*, 21 March 2010, Annex N, 5-6.

¹⁵Douglas M. Fraser and Wendell S. Hertzelle, “Haiti Relief: An International Effort Enabled through Air, Space, and Cyberspace,” *Air & Space Power Journal*, (Winter 2010), 9.

¹⁶Department of National Defence, *Strong, Secure, Engaged: Canada’s Defense Policy* (Ottawa: DND Canada, 2017), 39.

¹⁷Department of National Defence, *Canadian Forces Joint Publication, CFJP 01: Canadian Military Doctrine* (Ottawa: DND Canada, 2009), 1-1.

HADR doctrine is required to guide future operations. The RCAF, through the RCAF Advanced Warfare Centre (RAWC) has demonstrated the willingness to be a trailblazer and produce air force doctrine despite a lack of similar joint or alliance related doctrine as seen in the development of the Generate function and the doctrine to accompany it.¹⁸

12. A lack of emphasis and effort on the development of HADR and airlift doctrine has been noted on numerous occasions. One of the findings from the Lessons Analysis Project – Airlift Command and Control: Op Hestia was “Neither air force C2 nor air mobility doctrine has been promulgated in sufficient detail to effectively guide airlift operations in combined/joint operations.”¹⁹ Similarly, the 2013 report from Chief Review Services found: “Reviews and updates of Humanitarian Operations and Non-combatant Evacuation Operations (NEO) doctrine and contingency plans are not being conducted as per scheduled requirements, which may negatively impact the success of future operations.”²⁰ There is no formal CAF HADR doctrine and it appears that the updating and maintenance of related doctrine such as airlift is considered low on the collective priority list. The importance of HADR operations needs to be championed by senior leaders in order to provide the momentum for a change in priorities and creation of doctrine. Any HADR doctrine will need to be developed in collaboration with OGDs in order to define the supporting relationships and desired information flows. The CAF has a scalable contingency plan (CONPLAN) for international HADR type missions, “CONPLAN RENAISSANCE,” yet there is no formal doctrine to provide its foundation.

¹⁸Department of National Defence, *B-GA-400-000/FP-001. Royal Canadian Air Force Doctrine* (Ottawa: DND Canada, 2016), 28-29.

¹⁹Canadian Forces Air Warfare Centre, *Lessons Analysis Project Findings Report – Airlift Command and Control: Op Hestia*, 19 November 2010, 18.

²⁰Chief Review Services, *Evaluation of the Department of National Defense (DND) Contributions to Humanitarian Operations (HO), Disaster Relief Operations (DRO), and Non-combatant Evacuation Operations (NEO)*, October 2013, 22.

13. Having formal HADR doctrine would signal to the GoC, allies and other stake holders that the RCAF takes this type of operation seriously and is prepared. The creation of doctrine combined with support from strategic and operational level commanders would also force the RCAF to incorporate more HADR scenarios in exercise and training scenarios. It would also require the RCAF to have a closer look at the readiness levels of all units, including those considered as only domestic units. During Op Hestia, Search and Rescue crews from various units were deployed to Haiti. These personnel provided specialist medical care and evacuation to isolated areas which was highly needed in the aftermath of the earthquake. The JTFH final report recommended: “In any benign NEO/HA operation, make maximum use of SAR crews in the medevac role.”²¹ The inclusion of SAR assets as part of HADR doctrine in Canada would allow CAF leadership to demonstrate the need for an increased establishment at SAR units in order to be able to surge to cover both the regular domestic SAR mandate and HADR operations at the same time.

14. Another reason for the need to have HADR doctrine is the increasing interest in the development of the Urban Search and Rescue (USAR) capability within the CAF. SSE outlines the intent to develop the USAR role within Reserve units in Canada.²² This initiative will take some time to develop and without appropriate doctrine it may fail. In the meantime, any call for CAF USAR assets will likely result the use of the Op Hestia model where USAR was conducted by CAF member for the first time, by RCAF firefighters. Unfortunately, they were deployed too late to conduct any rescues and therefore focused on body recovery operations.²³ The inclusion

²¹Canadian Joint Task Force Haiti, *End of Tour Report Op Hestia*, 21 March 2010, Annex N, 9.

²²Department of National Defence, *Strong, Secure, Engaged: Canada's Defense Policy* (Ottawa: DND Canada, 2017), 68.

²³Canadian Joint Task Force Haiti, *End of Tour Report Op Hestia*, 21 March 2010, Annex I, 7.

of USAR in HADR is critical to ensure training, force establishments, readiness and CONPLANS are in place to support this emerging capability. It is important to note that Search and Rescue technicians are not formally trained in USAR, as it is not part of the RCAF SAR mandate.

CONCLUSION

15. This paper has demonstrated the increasing use of RCAF personnel in HADR related taskings over the last decade and the intent of the current GoC to employ CAF forces in future HADR missions. The likelihood of future crises requiring a HADR response has been shown to also have an increasing trend due to global environmental and social factors. Given these facts, many of the lessons learned from Op Hestia are still relevant and should be given due consideration in preparation for future crisis response missions. This paper has highlighted the need for HADR operations to become recognized as a core role within RCAF doctrine and that effective coordination and communication with OGDs and NGOs is necessary to ensure success in future international HADR operations. Integrating and communicating with OGDs and NGOs during HADR operations enables increased effectiveness through coordinated action and the sharing of information. In order to provide the greatest effect, the RCAF must continue to focus on being integrated and interoperable with military and non-military partners. The development of RCAF HADR doctrine will provide the guidance for future operations and also the basis for important JIMP training exercises, improved readiness levels and modified force structures.

RECOMMENDATIONS

16. It is therefore recommended that Commander RCAF, task the RAWC with the development and incorporation of the HADR role into RCAF doctrine and develop with the Commander CJOC, HADR specific JIMP training exercises in order to develop interagency cooperation, coordination and communication.

17. It is also recommended that Commander RCAF task the Director General Air Readiness to evaluate the impact of a formal USAR mandate on the firefighter trade and the impact of an additional HADR mandate on the establishment of RCAF SAR units.

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