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DISASTER RESPONSE VOLUNTEERS : MYSTERY PLAYERS OR KNOWN ENTITIES

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Exercise Solo Flight

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**DISASTER RESPONSE VOLUNTEERS:
MYSTERY PLAYERS OR KNOWN ENTITIES?**

By Major Justin Olsen

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DISASTER RESPONSE VOLUNTEERS: MYSTERY PLAYERS OR KNOWN ENTITIES?

In 2015, Public Safety Canada (PS) took over responsibility for the National Search and Rescue Secretariat from the Department of National Defence (DND). With this transfer came new responsibilities to Canada's Search and Rescue (SAR) system, including chairing the Interdepartmental Committee on SAR and the assumed designation as the Lead Minister for SAR. But, instead of seizing the lead for SAR, PS elected to expand the horizontal nature of SAR, adopting the symbolic title of "Champion for Ground SAR (GSAR)" in 2017¹, and developing forums for the provincial GSAR and Urban SAR (USAR) teams to foster cooperation. This decision is moving Emergency Management (EM) and SAR closer together and will affect how the Government of Canada responds to man-made or natural disasters in Canada. In light of obligations found in the National Defence Act, DND/CAF needs to consider whether this push by PS will change the operational tempo of CAF Force Elements that can respond to contingency plans, such as Operation LENTUS, or if these plans will require re-examination. It is reasonable to assume that PS will should meet some measure of success in coordinating volunteer accreditation and cross-provincial acceptance that may in turn reduce the burden of the CAF to respond to provincial requests for assistance; however, research into volunteer effectiveness in disaster response shows mixed results. This paper will examine PS goals articulated in public forums, the policy on which they are based, and assess the likelihood of success through academic research on the effectiveness of volunteers in disaster response.

¹ "SARscene 2017 Program," Public Safety Canada, Government of Canada, last modified July 12, 2018, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rspndng-mrgnc-vnts/nss/srscn/srscn-2017-en.aspx>.

From this assessment, possible outcomes for the CAF will be generated through analysis of PS's plan of the Strengths, Weaknesses, Opportunities, and Threats.

Policy Review

Two Acts, the National Defence Act (NDA) (Public Service, sec. 273.6), and the Emergencies Act (National Emergencies, sec. 3),²³ govern DND/CAF's involvement in disaster response in Canada. *Strong, Secure, Engaged*, the most recent Defence policy document, works within the NDA and confirms the Government of Canada's intention that the DND/CAF will maintain the ability to respond to multiple, concurrent natural or man-made domestic disasters, while at the same time preserving capability to respond to an international disaster.⁴ The Emergencies Act also designates PS to be the lead federal department during domestic disasters requiring federal assistance, but because the province maintains jurisdiction over the incident, the department can only facilitate assistance, not take over incident command. Outside of the Emergencies Act, PS has developed, with cooperation from the provinces and territories, an Emergency Management Framework and an Emergency Management Strategy. The Framework is a broad document but pertinent to this study as it confirms the all-hazard approach.⁵ The Strategy, on the other hand, prioritizes whole-of-society resilience within communities, to include response during incidents.⁶

Without personnel to conduct disaster relief operations or the jurisdiction to exercise command, PS relies on other departments, such as DND/CAF, to put boots on the ground when

² "National Defence Act," Department of Justice, Government of Canada, Accessed on May 15, 2019. <https://laws-lois.justice.gc.ca/eng/acts/N-5/page-58.html#h-379434>.

³ "Emergencies Act," Department of Justice, Government of Canada, Accessed on May 15, 2019. <https://laws-lois.justice.gc.ca/eng/acts/E-4.5/page-1.html#h-213825>.

⁴ Department of National Defence (DND), *Strong, Secure, Engaged*, p. 17.

⁵ Public Safety Canada, *An Emergency Management Framework*, p. 11.

⁶ Public Safety Canada, *Emergency Management Strategy for Canada*, p. 9.

responding to Requests for Assistance (RFA) from provincial or territorial governments; however, this is changing with a new policy direction within PS: facilitation of inter-provincial use of volunteers.⁷ It must be noted that working within a different province, even as a professional, is not as easy as it may seem,⁸ and this creates impetus for PS to work with the provinces and territories to smooth the regulatory landscape. Accreditation and liability issues present the greatest challenges to PS's goal of expanding the reservoir of capable responders; therefore, advisory committees, such as the Search and Rescue Volunteer Advisory Committee (SARVAC), work to find international standards by which volunteers can be judged for capability and suitability for tasks in a response. Additionally, the Heavy Urban Search and Rescue (HUSAR) teams, known as Canada Task Forces (Can-TF), are training to further develop all-hazard capabilities across Canada. Although these teams are technically owned by the province in which they are based, and the five teams are not yet trained to a common standard, federal funding is available to develop response capabilities beyond HUSAR.⁹ PS's efforts are focused on trained volunteers, not emergent or spontaneous volunteers, but many factors affect combined or joint disaster responses, and it is not obvious what level of success may come.

Literature Review

Academic research into volunteer responses to disasters tends to concentrate on the emergent or spontaneous volunteer, which differs from PS's emphasis, but reveals overlapping difficulties with trained volunteers. Emergent volunteers may have skills directly related to the

⁷ "SARscene 2017 Program," Public Safety Canada, Government of Canada, last modified July 12, 2018, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rspndng-mrgnc-vnts/nss/srscn/srscn-2017-en.aspx>.

⁸ An example of this is nursing. Each province has its own Nurses Association, so a nurse must register in the province in which he/she intends to practice.

⁹ "Heavy Urban Search and Rescue (HUSAR)", Public Safety Canada, Accessed on May 15, 2019, <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rspndng-mrgnc-vnts/hvyrbn-srch-rsc-en.aspx>.

task at hand, for example a doctor or nurse administering first aid, or they may be unskilled, but aware that the task must be completed, such as many first responders to building collapses after an earthquake. Incident commanders (IC) face challenges integrating these volunteers into the response force because they don't know what the volunteers can safely do and the volunteers don't necessarily understand how the command structure works. This leads to a dilemma for the IC because there could be utility that is tempered with the possibility of liability¹⁰. Barsky et al. noted opinions by SAR managers that a national accreditation system would provide accepted means to confirm a volunteer's utility and that local training programs create a pool of potential volunteers that see themselves as useful, but without credentials or expertise equal to that of the professionals.¹¹

Some research does examine trained volunteers, but the level of training is not well documented. Canadian research on volunteers in disaster response reveals risks and benefits to greater use of volunteer resources. Hutchinson's research into the Vancouver Fire & Rescue Services (VF&RS) work with Neighborhood Emergency Assistance Teams (NEATs)¹² demonstrated a conflict of interests for the professional fire fighters to use the NEATs to their full capability due to the closed culture – a tendency to trust other firefighters, but not outsiders – existing in VF&RS, but paradoxically there was also admission within the VF&RS that it needed to do better at integrating outsiders.¹³ Other research by Waldman, Yumagulova, Mackwani, Benson, and Stone underscores the international interest in this topic, and the increasing municipal efforts to manage citizen volunteers within Canada.¹⁴ Waldman et al. argue that better

¹⁰ Barsky et al., "Managing volunteers," p. 497.

¹¹ Barsky et al., p. 503.

¹² NEATs are teams of regular citizens who get basic training in ICS work and how to support professional responders.

¹³ Hutchinson, "Career Urban Firefighters' Perceptions," p. 72

¹⁴ Waldman et al., "Canadian citizens volunteering in disasters," p. 1.

integration of volunteers into provincial frameworks and rhetoric is required, and that a possible avenue to accomplish this could be through already recognized organizations, such as the Red Cross.¹⁵ Because of the complex nature of this problem, it should be accepted that some trial and error will be needed to find the ultimate solution, as outlined in problem structuring methods, such as Cynefin.^{16 17}

With growing acceptance that volunteers need to have a means to integrate into response, some of the barriers to this must be identified. A significant challenge to any response is effective command and control of the responders, and despite attempts to codify the system with the Incident Command System (ICS), it is not as simple as establishing a common language. Even in cases with common ICS knowledge, responders depend on pre-existing relationships and trust to empower the combined response.¹⁸ Within a municipality, there could be opportunity to conduct combined exercises between professional or even volunteer agencies, and the United Kingdom has seen the benefits of simply observing a partner's training exercise to identify potential gaps in communications and coordination.¹⁹ What is not identified in either Kim's or Chang and Trainor's work is the schedule of cooperation needed to build relationships or realize the benefits of combined exercises. Chang and Trainor note that volunteer directors able to participate in planning before a disaster, can be included in the ICS team faster than personnel who were simply names on a data card, so proximity to the emergency operations centre is important.²⁰ What can't be concluded from this research is if a relationship can be established

¹⁵ Waldman et al., p. 8.

¹⁶ Snowden and Boone, "A Leader's Framework Decision Making," N.P.

¹⁷ Cynefin groups problems into classes that range from Simple, i.e. Standard Operating Procedures will handle any example, to Chaotic, i.e. the problem is so fluid and has so many unknown unknowns that trial and error is the only way to address it.

¹⁸ Chang and Trainor, "Pre-Disaster Established Trust and Relationships," p. 1.

¹⁹ Kim, "Learning from UK disaster exercises," p. 846.

²⁰ Chang and Trainor, p. 8.

with volunteers outside the immediate area or if the local volunteer director could act as the leader for volunteers not known by the Incident Commander.

Additionally, the challenge of standards and accreditation must be addressed, since it is not enough to know how to work within ICS, volunteers must also be able to do so safely. The United Nations (UN) has considered this problem in light of the development of a new legal field, International Disaster Response Law. Of course, domestic disaster response is not identical to international response, but areas of overlap can be found in Canada, since provincial borders are not transparent regarding the right to work, etc. Bookmiller asserts that in the period immediately following a disaster, professional standards for USAR and health professionals make it easier for a state to open its borders to outside assistance.²¹ This line of reasoning could be applied to Canadian responses, if there was agreement between provinces and territories, but the work underway by PS to advance the status of volunteers, not only the Task Forces, will have to progress further to facilitate this.

Finally, if one can accept that legal hurdles will be overcome, there is the risk of operational stress injuries to volunteers who find themselves enabled to respond outside their immediate area. Operational stress injury (OSI) to volunteers responding to disaster is more likely because the initial response phase can be chaotic, demoralizing due to the slow rate at which the situation may improve, and many responders detail a reduced sense of personal control.^{22,23} Dolce and Ricciardi argue that this risk requires additional, specialized training for volunteer response workers to not only protect themselves, but to enable greater confidence

²¹ Bookmiller, "Professional Standards and Legal Standard Setting," p. 959.

²² Dolce and Ricciardi, "Impact of psychological risk factors," p. 93.

²³ Cristea et al., "Moderating effects of empathic concern," p. 748.

when acting within a disaster response area.²⁴ Unlike DND/CAF, volunteer efforts will continue from the Response phase into the Recovery phase; therefore consideration of the length of time that individual volunteers can expect to be present is an important consideration, but one that is difficult to quantify, because of gaps in the research.²⁵

Discussion

An obvious strength of PS's plan to enable use of volunteers across provincial boundaries is the additional resources it would add to the pool of available, capable people, able to effectively contribute to a disaster response. As seen through evidence around the world, volunteers are increasingly important in disaster response, but Incident Commanders can struggle to separate the willing from the able.²⁶ In a catastrophic event, such as seen in the earthquake in Haiti, or the tsunami in Banda Aceh, the local population may be unable to mount a response that can address the level of devastation, and outside help may be the only way to save those who need it in the first 48 hours.²⁷ Accreditation or standardization of volunteers can also benefit response within provincial or territorial boundaries, since it would provide professional responders with documents that establish any volunteer's skills; support for this effort should be found across the country, and the NEATs in Vancouver indicate that it is already happening at the local level. Additionally, Team Rubicon is expanding to Canada, so the pool of volunteers will grow through this effort, too.²⁸ Accreditation or standardization is only the first step, though, and it will not solve all the potential problems.

²⁴ Dolce and Ricciardi, p. 102.

²⁵ Cristea et al., p. 750.

²⁶ Waldman et al., p. 1.

²⁷ Bookmiller. p. 974.

²⁸ Brumwell, "Team Rubicon offering assistance during disasters," *Canadian Military Family Magazine*, June 27, 2018. Accessed on May 24, 2019. https://www.cmfmag.ca/duty_calls/team-rubicon-offering-assistance-during-disasters/.

Creating a national standard does not address neither relationships nor trust within the responder community, and because response teams are provincially funded, PS has few tools to encourage trust and relationship development between volunteers and the professionals who may employ them. Even professional organizations need to exercise together to create or maintain the bonds of trust, which in turn facilitates the adaptation or improvisation of plans during a chaotic response.²⁹ This comes with a cost, both in the time to plan and execute an exercise, and the funds needed to enable participation. Without funding, volunteers from further away would not be able to spare either resource to take advantage of exercises. Larger organizations, such as the Can-TF teams do incorporate travel for exercises in their business planning,³⁰ but these are the exceptions to the majority of volunteers. Without the means to exercise with professionals, even volunteers that were accredited could find themselves underutilized as the Incident Commander balances trust with liability issues.

On top of the challenge of encouraging exercise participation to build trust, PS must acknowledge the additional training required to protect the mental health of volunteers. Data on how much training is already carried out is hard to find, but forgetting to include this vital aspect of preparation exposes the system to risk that volunteers could burn-out after one response due to an OSI. Loss of these accredited volunteers would weaken future responses, unless the ranks could be refilled, but it would also lead to long-term health care liabilities in areas unaffected by the disaster. Whether or not this training could factor in negotiations over standards is unknown, since the stakeholders in both volunteer production and health care provision are the provinces

²⁹ Kim, p. 855.

³⁰ "Cantf2 – Exercises," Can-TF2 Alberta, Accessed May 15, 2019, <http://www.cantf2.com/#exercises>.

and territories, but it should be encouraged to create resiliency within the volunteer networks, otherwise the overall strength would suffer.

If PS's plan is successful, DND/CAF could discover several opportunities in terms of training and savings. For example, a national standard for volunteers could be something to which DND/CAF could also agree to meet when its members participate in domestic disaster response. This would inform Training Development Officers what skills should be demonstrated in existing training syllabi, and expose any potential gaps. Identified gaps would allow leaders to guide the supporting roles of military responders when liaising with the Incident Commander. If combined exercises become more common, DND/CAF participation could not only create a sense of trust between military and provincial/territorial officials, but also provide economical means to gain experience in combined operations and transferable skills to other operations. A specific training opportunity could be found within combined USAR operations, a valuable chance to match policy in SSE with existing civilian capabilities.

Ultimately, if Canada develops the means to mobilize volunteers across provincial and territorial boundaries, DND/CAF could find itself responding to fewer RFAs. On one hand this may be interpreted as an opportunity to reduce the number of personnel on short notice-to-move timelines and the amount of training completed given its secondary duty, aid to the civil power, but the on the other hand there is risk of eroding skills. A risk assessment of this threat could conclude the frequency at which DND/CAF would receive RFAs will diminish, i.e. regular to remote, but the result of DND/CAF being unable to respond effectively to an RFA will always be catastrophic to both the Institution's image, and to that of the Government of Canada. Even should an agreement between provinces and territories be reached and PS finds a way to coordinate response, unknowns such as the resiliency of the volunteer network to reconstitute

following an activation would need to be monitored over years before any decision on DND/CAF capability reduction could be made. Today, extant policy states that DND/CAF will be able to respond effectively to concurrent domestic disasters³¹ and in the absence of evidence, strategic leadership will have to continue to maintain this ability, but should also monitor the situation for changes.

Conclusion

PS's plan to lead the provinces and territories into a new way of mobilizing volunteers for disaster response is the first step to acknowledge the rising importance of volunteers in augmenting responses to catastrophes. Until now, the USAR model has been the pinnacle of the volunteer framework; trying to move towards all-hazard response will increase the utility of teams beyond building collapse and reflects growing evidence that hazards such as wildfires and floods need more consistent volunteer availability. However, the problem of integrating volunteers into professional response is complex and includes not only legal aspects, but also liability and human factors, such as trust and relationship building. The solution to this problem will be found only through trial and error, because it is impossible to predict every situation; it will take years to iron out most of the residual problems, if it can be done at all.

For now, DND/CAF will have to adopt a monitoring strategy. In the short term, as opportunities to participate in combined exercises present themselves, military participation should rise and may eventually involve assistance in planning exercises. Because volunteer capability is not uniform across Canada, RFAs will still come in from some areas, even if PS enjoys some success in overall coordination. It is the unknown unknowns that increase the

³¹ DND, p. 17.

complexity of the problem from DND/CAF's point of view. Questions of whether volunteers from outside the affected area will be effectively used by the Incident Commander; how resilient the volunteer network will be to events that happen soon after one another, or in close geographic proximity; and whether public opinion will demand a military response, regardless of actual needs, point towards the requirement to maintain an ability to respond to any disaster, regardless of how infrequently it is needed.

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