



### Leaning Forward: Joint Task Force North, Civil-Military Relations, and Domestic Disaster Response in the North

BRIDGING THE GAP ARTICLE

https://doi.org/10.25071/35d8gj73

Peter Kikkert<sup>1</sup> and P. Whitney Lackenbauer<sup>2</sup>

### \*Correspondence to

Peter Kikkert pkikkert@stfx.ca

#### **Author affiliations**

<sup>1</sup>St. Francis Xavier University <sup>2</sup>Trent Univesity

### Acknowledgement:

We would like to thank all of the individuals who share their insights and expertise with

Published: August 11, 2025

Ethical approval for this project was obtained form the Nunavut research Institute (Research License No. 05018 22N-M) and the St. Francis Xavier Unviersity Research Ethics Board (File 25969).

### Cite this:

Kikkert P. & Lackenbauer, P.W. (2025). Leaning forward: Joint task force north, civil-military relations, and domestic disaster response in the north. Canadian Journal of Emergency Management. https://doi.org/10.25071/35d8gj73

© 2025 The Author(s) or their employer(s). Published by the Canadian Journal of Emergency Management. This is an open access article distributed under the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

**OPEN ACCESS** 

#### **ABSTRACT**

Communities in Canada's North face unique challenges in disaster response due to extreme environmental conditions, geographic remoteness, and limited infrastructure and territorial emergency management capacity. These factors often necessitate federal support, including assistance from the Canadian Armed Forces (CAF). This article examines the role of the CAF, specifically Canadian Forces Northern Area (CFNA) and its successor, Joint Task Force North (JTFN), in strengthening the intergovernmental and interorganizational collaboration required for disaster response in the region. Although we identify limitations and areas for improvement in these efforts, we argue that JTFN has consistently "leaned forward" to build and sustain the collaboration required for whole-of-government disaster response operations, while making broader contributions to the practice of emergency management in the North. Although this article focuses on the Canadian North, it adds to the wider body of research on civil—military cooperation during domestic disasters — a critical area of study given the prominent role militaries often play in disaster response.

**Keywords:** Canadian Armed Forces, Joint Task Force North; territorial North; disaster response; intergovernmental and interorganizational collaboration; Arctic Security Working Group; exercises; liaison officers.

### INTRODUCTION

Communities in Canada's North are exposed to a wide array of hazards, ranging from wildfires, floods, earthquakes, severe weather, melting permafrost, and landslides to prolonged power outages, cyber threats, and major transportation accidents – many of which are exacerbated by the effects of climate change. The risk this exposure creates is amplified by the austere nature of the region's environment, the remoteness and inaccessibility of many northern communities, their distance from external sources of assistance, their small pools of human power from which to generate a disaster workforce, their limited local and territorial emergency management capacity, and their aged, weakened, and inadequate critical infrastructure (Cox, 2014; Funston, 2009; Kikkert & Lackenbauer, 2021; Lauta et al., 2018; Munk-Gordon Arctic Security Program, 2014). These factors often allow hazard events to cascade into

more profound situations and create logistical and operational challenges that increase the difficulty of executing timely and effective responses. As one Nunavummiut emergency responder pointed out.

Responding can be tough, absolutely. You got 25 small communities spread over more than two million [square] kilometres. Many of them have very limited resources and you can only get to them by air most of the year, if the weather lets you. Help is always a long way away ... And there really isn't very much help in the territory. (Comment made during Kitikmeot Roundtable on Search and Rescue, Yellowknife, November 20–22, 2022)

Given the unique challenges in Canada's North, the territories often require federal assistance, including the services of the Canadian Armed Forces (CAF), to respond to certain disasters. "We do a lot on our own. But we also know that the military can help with a lot of the problems we face," explained one territorial emergency management official. "And these are issues that a lot of our southern partners don't have to deal with, not in the same way" (Territorial emergency management official, comment made during Mass Rescue Tabletop Exercise at the Kitikmeot Roundtable on Search and Rescue, Yellowknife, November 20-22, 2022). The capabilities that make the CAF effective during disaster response operations are particularly relevant in the North: strategic airlift assets, planning and logistical resources, and the ability to quickly put hundreds of self-sustaining boots on the ground.1 The Army in particular offers a source of human power that is physically fit, does not get paid overtime, can work for extended periods, and can be put in harm's way (Botha, 2022). "I actually think [the territories] have done a pretty good job of not relying on [the CAF] too much for help," noted the territorial official, "But it's important for us to know that we do have some backup if we need it and that it's ready to go" (Territorial emergency management official, comment made during Mass Rescue Tabletop Exercise at the Kitikmeot Roundtable on Search and Rescue, Yellowknife, November 20-22, 2022).

The CAF has long recognized the need to prepare to support disaster response activities in the North

within a broader whole-of-government approach involving close collaboration between all levels of government and across different agencies and departments. In 1999, Canadian Forces Northern Area (CFNA) worked with its civilian partners to create the Arctic Security Working Group (ASWG), a biannual forum that continues to bring together participants from federal departments and agencies, as well as territorial governments and other northern stakeholders, to discuss a wide array of safety and security issues.2 From its first meeting, participants have emphasized the need to strengthen the civilmilitary relations that facilitate rapid responses to disasters. When CFNA transitioned into Joint Task Force North (JTFN) in 2006, the regional headquarters took seriously its directive from Canada Command to increase its readiness and capability to respond to all types of domestic emergencies in the region. JTFN established stronger working relations with territorial emergency management officials, particularly through its liaison officers, and developed standing procedures and contingency plans to respond to civilian requests for assistance (Bell, 2006; Russell, 2009). Colonel Norm Couturier, the task force's first commander, pledged that his staff would help "develop plans to ensure that authorities are able to respond to a civil emergency within 24 hours." The defence team, Colonel Couturier explained, would test plans "in exercises conducted with various agencies, to make sure they work" - which JTFN has done almost every year since, through the emergency response components of major military exercises in the North (Exercise NARWHAL and then Operation NANOOK) (Bell. 2006). In October 2023. JTFN's current commander, Brigadier-General Dan Rivière, echoed his predecessor, highlighting the importance of exercises that validate "our shared emergency processes" and concluding that, in the North, "[o]ur strength is the level of collaboration" between all levels of government (as cited in Government of Yukon, 2023a). In short, CAF leadership has consistently emphasized the need to adopt a proactive and anticipatory "lean forward approach" to generate the experience, skills, and networks required to engage in potential disaster and

<sup>&</sup>lt;sup>1</sup> Many of the individuals interviewed for this project highlighted that, although CAF personnel do draw on the resources of the areas in which they are deployed, they are still highly self-sustaining – particularly compared to other federal, territorial, and volunteer resources.

<sup>&</sup>lt;sup>2</sup> Established in 1999, the ASWG was initially known as the "Symposium on Arctic Security Issues." In May 2000, the name of the group changed to

the Arctic Security Interdepartmental Working Group, and seven years later, the group became known simply as the Arctic Security Working Group. Rightsholders and stakeholders invited to participate have included Indigenous governments and associations, non-governmental organizations, private sector, and academics.

emergency response roles in the North (Russell, 2009, pp. 77, 87).<sup>3</sup>

Using ASWG meeting materials, after-action reports, media stories, and practitioner interviews, this article explores how CFNA/JTFN has worked with its civilian counterparts to build a "whole of government" approach to prepare for disaster response activities in the North. CFNA and subsequently JTFN have primarily done so in three ways: by chairing or co-chairing the Arctic Security Working Group, by strengthening relationships with territorial and local officials through its liaison officers and the Canadian Rangers, and by organizing and facilitating annual large-scale response exercises.4 Although we identify limitations and areas for improvement in these initiatives, we also argue that JTFN has consistently "leaned forward" to build and sustain the intergovernmental and interorganizational collaboration required for whole-of-government disaster response operations, while making broader contributions to the practice of emergency management in the North. It has done so even though these contributions fall outside the CAF's primary mandate and seem to conflict with its intended role as a "force of last resort" in disaster response. We then assess the results of these efforts by examining JTFN's involvement in several large-scale responses: the crash of First Air Flight 6560 in 2011, the COVID-19 pandemic, the 2021 flooding in the Northwest Territories (NWT) and the Yukon, and the Igaluit Water Crisis. The latter two cases represent the first occasions on which Operation LENTUS, the military's standing operation to provide assistance and respond to disasters within Canada, deployed to the territorial North. Although this article focuses on the Canadian North, it contributes to the wider body of research on civil-military cooperation during domestic disasters a critical area of study given the prominent role militaries often play in response operations.

## CIVIL-MILITARY RELATIONS AND DISASTER RESPONSE: REQUIREMENTS FOR SUCCESS AND KEY CHALLENGES

The role of the Canadian Armed Forces in disaster response has grown significantly over the last two decades. In Canada, when an emergency situation escalates beyond the capabilities and/or capacity of a province or territory, provincial/territorial governments

submit a formal request for assistance (RFA) to the federal government that outlines the additional resources that the jurisdiction requires for an effective response (Public Safety Canada, 2024). Between 1990 and 2010, provincial RFAs resulted in the CAF's participation in six humanitarian assistance and disaster relief missions. Since that time, the CAF's involvement in disaster response "has broadly doubled every five years." The CAF completed seven Operation LENTUS deployments in 2021, seven in 2022, and eight in 2023 (Department of National Defence [DND], n.d.; Standing Committee on National Defence, 2024). The military's unique capabilities, the limited provincial/territorial investment in emergency management, and the lack of other options across the country have transformed the military from a force of last resort in disaster response into a force of first - or only - resort (Kikkert, 2021; Standing Committee on National Defence, 2024).

The effectiveness of these disaster response activities depends on close domestic military cooperation with local and regional authorities and first responders in an integrated whole-of-government approach that cuts across traditional institutional silos to achieve a shared goal. Although there is extensive research on interorganizational cooperation during disasters and on civil-military cooperation in expeditionary (conflict) settings, few studies look in detail at civil-military cooperation in domestic disasters and how distinct organizational cultures, structures, and operational approaches complicate collaborative efforts between military and civilian actors (Bollen & Kalkman, 2022, p. 80). Work that has been completed on the subject emphasizes the importance of a shared civil-military belief in the value of cooperation, strong interpersonal relationships, formal and informal networks, the effective exchange of information, clarity on command and control, and a mutual understanding of roles, responsibilities, capabilities, and processes (Ahmed et al., 2023; Bollen & Kalkman, 2022; Dahlberg et al., 2020; Kalkman, 2019; Tatham & Rietjens, 2016). Using a framework that cuts across the literature on emergency management, civilmilitary relations, and public administration, Botha (2022) identifies several critical components for the effective use of the military in disaster response: information sharing, non-manipulative influence,

components have been completed under the leadership of other military organizations. For instance, Joint Rescue Coordination Centres and their federal and territorial partners have spearheaded major air and major marine disaster exercises.

<sup>&</sup>lt;sup>3</sup> The idea of "leaning forward" was raised frequently by participants in the Arctic Security Working Group and by military personnel interviewed for this project.

<sup>&</sup>lt;sup>4</sup> We are primarily covering the work that Joint Task Force North has spearheaded. Other military exercises with emergency management

flexibility, support, collective conflict resolution, coordination, integration, satisfaction, trust, and processes to deal with conceptual differences (see also Fremis, 2021; Hudson, 2021; MacGregor, 2012; Rock, 2021; Saul, 2019; Shadwick, 2018; Thomas, 2014).

Botha's book-length study on the CAF's role in disaster response - the first such study produced in the Canadian context - focused on case studies of disaster response operations in southern Canada, generally successful hiahliahtina civil-military collaboration that is marked by effective information sharing, high levels of trust, and a strong coordination of effort. CAF personnel, particularly liaison officers and local Reservists, generally maintain strong links with key emergency management partners even in non-disaster times, which has facilitated the creation of shared situational awareness and speedy and effective responses. These formal and informal networks have allowed the CAF to "lean forward" during past disaster events, preparing responses before the federal government has received formal provincial requests for assistance (Botha, 2022, pp. 101-102). Nevertheless, Botha identified several possible friction points and areas for improvement. "Benign incapacity" - defined as situations in which "limited technical, fiscal, institutional, equipment, or labour capacity" inhibit an organization's willingness to collaborate - has acted as a barrier to civilian emergency management organizations working effectively with their military counterparts (2022, pp. 119-120). Civil-military interoperability planning processes and front-line disaster deployments has also been limited - although that non-interoperability has not seemed to reduce the effectiveness of on-the-ground responses (Botha, 2022, p. 148).

The largest challenges in Canadian civil-military relations during disaster response operations stem from "conceptual differences" in defining the actions required to reach a clear end state – which, from the military's perspective, is a return to civilian services as quickly as possible – and issues around the RFA process. Regarding the end state of operations, civilian emergency management officials tend to see response and recovery efforts flowing into one another without rigid boundaries, while, from the beginning of its deployments, the CAF is eager to set a clearly defined line at which a response moves into recovery and the military's role ends. The RFA process has caused even more confusion and disagreement. An appropriately worded RFA asks for an effect rather than linking tasks

to specific military capabilities, providing the federal government with maximum flexibility in determining a response. Too often, however, RFAs ask for specific military capabilities and exact numbers of personnel, providing little room for the CAF to manoeuvre. As Botha (2022) notes:

Once the RFA passed from a province's solicitor general (or equivalent) to the (federal) minister of public safety, and from there to the minister of national defence for sign off, the parameters for CAF action – their 'left and right of arc' in military-speak – were set in stone. (p. 72)

As a result, during disasters, jurisdictions often requested services that the CAF could have provided, but, as they were beyond the scope set by the RFA, it was unable to do so (Botha, 2022).

Botha's findings on the RFA process mirror broader international trends. Bollen and Kalkman (2022) argue that creating increasingly rigid parameters for engaging military assistance represents a common approach to reducing the complexity of civil-military disaster response operations. These efforts aim to create

an illusion of control: ever more detailed and stricter guidelines, definitions, and directives to achieve domain and goal consensus. In the meantime, the discretionary space for operators in the field is reducing and spontaneous civil-military cooperative efforts in response to urgent needs are viewed with skepticism or reversed. (p. 86)

In the Canadian context, Botha concludes that, while CAF commanders often view the RFA as critical to democratic oversight and to avoid civilian dependence on the CAF, the process represents an "institutional constraint to [the] CAF's ability to freely aid disaster response partners in any way its commanders saw fit" and "to civilian influence over CAF response actions" (2022, pp. 70, 73, 126). Despite JTFN's proactive approach to working with its territorial partners, these conceptual differences have also emerged in past northern exercises and disaster response operations.

### WORKING AT THE "SPEED OF TRUST": JTFN, TEAM NORTH, AND PREPARING FOR DISASTER

Military responsibility for the Canadian North (defined as the area north of 60° North latitude) falls

under Canadian Joint Operations Command (CJOC), with the three northern territories being the responsibility of Joint Task Force North (DND, 2018). JTFN's complement includes over 300 military and civilian personnel, the majority of whom are stationed in Yellowknife, with small detachments in Iqaluit and Whitehorse. The joint task force also hosts and supports three lodger units: 440 Transport Squadron (part of 8 Wing Trenton); C Company (part of the Loyal Edmonton Regiment); and 1st Canadian Ranger Patrol Group or 1CRPG (part of 3rd Canadian Division).

JTFN, like the five other Regional Joint Task Forces (RJTFs) across Canada, maintains continuous situational awareness, liaises with civilian authorities, and coordinates, supports, and conducts operations in its area of responsibility. "During domestic operations," Alexander Fremis (2021) notes, "RJTF commanders will form task-tailored forces and direct their employment in assisting civil authorities... RJTFs form the brain and backbone from which CAF domestic deployments are directed" (p. 67). Generally, responses to RFAs submitted in a specific region involve the deployment of task-tailored forces located within that region. It is possible, however, for RJTFs to share units depending on available resources, the tasks to be completed, and the scale of a disaster event (Hartwick, 2020-2021, pp. 36-37; Hudson, 2021). Given its limited human-power resources, JTFN often must deploy soldiers from other RJTFs to execute most of its operations, including disaster response. In responding to territorial RFAs, JTFN can draw upon the approximately 1,600 Canadian Rangers of 1CRPG, located in 65 communities across the North; southernbased Immediate Response Units (IRUs), which can be temporarily assigned, deploy in between 8 and 24 hours, and are "scalable to the situation" Arctic Response Company Groups, composed of southernbased Primary Reserve members used to augment IRUs; and other CAF resources, including aerial assets, as required (Hartwick, 2020-2021). These resources are important, but their effective use in disaster response depends upon the mechanisms that CFNA/JTFN has put in place to enable civil-military cooperation in the North.

### THE ARCTIC SECURITY WORKING GROUP

Through a collaborative "Team North" approach, the ASWG is intended to serve as a boundary-spanning

<sup>5</sup> Examples include territorial emergency management organizations and departments of health, Indigenous governments and associations, the Royal Canadian Mounted Police, Public Safety Canada, the National Search and Rescue Secretariat, the Canadian Armed Forces, the Canadian Coast

institution that brings a wide range of government and non-government actors together to discuss security and safety issues, strengthen relationships, share information, and coordinate activities, programs, and resources. As the working group's terms of reference explain, "with limited assets, departments and agencies operating in the region understood that by working together through the ASWG, their collective strength would be greater than individual efforts" (Arctic Security Working Group [ASWG], 2012). The ASWG holds biannual two-day meetings, usually in May and November. Originally chaired solely by the commanding officer of CFNA and then JTFN, Public Safety Canada's Northern Regional Manager for Emergency Management assumed the co-chair position in May 2008. In 2017, however, the territorial governments assumed the role of co-chairs from Public Safety, serving on a yearly rotating basis. As a result, the constant in the ASWG's leadership and direction has been CFNA/JTFN.

Early in its existence, emergency management practitioners the ASWG's interoperability on subcommittee noted that the working group could improve the "horizontality and harmonization" required to respond to "disaster/crisis level" events in the unique Arctic operating environment ("Team Interoperability," 2003). Specifically, these practitioners highlighted how the working group's "face-to-face" meetings could be used to build key relationships, share the information required to develop a "clear and full understanding of roles, responsibilities, and capabilities" (including which organizations should be in the lead during various situations), and facilitate efficient communications and coordination ("Team Interoperability," 2002; "Team Interoperability," 2003).

The face-to-face meetings facilitated by the ASWG have helped to develop the relationships required to conduct whole-of-government responses. Since 1999, the working group's regular membership has grown from 21 to well over 100, with strong representation from a wide array of the organizations and agencies involved in northern disaster response operations. <sup>5</sup> During a presentation in November 2016, a Public Safety Canada representative insisted that a group like the ASWG is uniquely suited to build the connections and social ties required during crisis situations so that "we can move at the 'speed of trust" ("Fort McMurray," 2016). Emergency management practitioners involved

Guard, Transport Canada, Natural Resources Canada, Environment Canada, the Public Health Agency of Canada, Parks Canada, and Global Affairs Canada.

in the working group have consistently noted the interpersonal linkages, interorganizational trust, and resultant belief in the value of cooperation that have been fostered through the ASWG. In May 2009, for instance, a representative from Nunavut Emergency Management (NEM) noted that the ASWG "continues to be a forum of importance to Nunavut. Contact with and assistance from other agencies developed at these meetings has greatly assisted us in meeting the ever-growing challenges we face" (Nunavut Emergency Management, 2009). Over a decade later, another member of NEM also cited the working group's relationship-building role and how it helps to bridge one of the realities of northern governance: the high turnover of federal and territorial staff. "I see the value of the meetings because there's always new people in all these offices," he observed. "The military changes a lot ... so you are always trying to work with new people and you have to get used to it. It would be nice if this wasn't the case, but at least [the] ASWG lets you meet them face to face. I know that makes it easier to call" (Territorial emergency management official, personal communication, November 20-22, 2022). The relationships fostered over coffee and shared meals at the ASWG build trust and improve communication and coordination, representing the working group's greatest contribution to disaster response in the North (see also Russell, 2009).

Still, the ASWG does not include every entity involved in disaster response operations in the region. After a tabletop exercise in 2004, for instance, one territorial emergency management director questioned whether the ASWG was the right platform for such exercises given that it "was not a response group" and that all the "right people" were not at the table ("Minutes," 2004). In his 2009 assessment of the ASWG's role in enhancing disaster and emergency management in the territorial North, Ivan Russell (a member of JTFN who had served on the working group) highlighted the strong interpersonal connections that the working group created. However, he also noted that it had to do a better job of including Indigenous governments, the private sector, and international partners in the network it was creating. While involvement in the ASWG has continued to grow since 2009, including broader participation from Indigenous governments and organizations, many of the actors that might be involved in disaster response in the North are still underrepresented or absent, including private sector, non-governmental, and municipal-level entities.

Beyond building relationships, ASWG meetings have also served as an important platform for

improving shared situational awareness and for the exchange of information regarding emergency response roles, responsibilities, and capabilities. Federal and territorial departmental updates often include information on emergency response capacities and issues, while territorial emergency management organizations frequently explain their plans and structures. Many of the meeting themes, which dictate presentation and discussion topics, are directly relevant to emergency management practitioners, such as multi-domain awareness and information sharing (November 2019), multi-agency collaboration (November 2017), critical infrastructure (November 2016), energy security (May 2016), cyber security (May 2015), oil spill response (May 2014), and northern resilience (May community 2013). Various presentations and discussions have also attempted to educate ASWG members on how to obtain and employ federal assistance, including briefings from Public Safety Canada on how to craft an effective RFA (2013, 2018, and 2021), which should have allowed members to bypass some of the conceptual differences that Botha has identified in civil-military disaster response operations (Role of Public Safety Canada, 2018).

While these presentations create a better shared understanding of emergency management issues between practitioners working in and with the three territories, it is fair to question the impact they have on preparing JTFN and its civilian partners for collaborative, whole-of-government disaster response operations. The vast majority of presentations, one federal member of the ASWG noted, follow a "this is what we've done rather than this is how we do it' format" - a trend that has grown over the years (Federal member of the ASWG, personal communication, September 3, 2021). Another long-standing ASWG participant noted that "it's been a long time since [the] ASWG actually spoke about how emergency management works and the associated processes, decision nodes, mandates and responsibilities" (Federal member of the ASWG, personal communication, September 3, 2021). In 2022 and 2024, territorial members echoed these sentiments, suggesting that the ASWG "does a good job of bringing people together" but generally consists of "long presentations" focused on "policy and high-level stuff," with little space for learning how to "work together" during incidents (Territorial emergency management official, personal communication, November 20-22, 2022; Territorial emergency management officials, personal communication, August 8, 2024). Further, although relatively detailed reviews of past incidents

(e.g., First Air Flight 6560, the Iqaluit Water Crisis) at the ASWG have exposed pressing response issues, there has been little effort to compare after-action reviews and identify common areas for improvement. There is also no process in place to support the translation of lessons observed into lessons learned, measured as new approaches and changed behaviour during operations.

Past tabletop exercises (TTXs) have exposed some of the limitations of the ASWG's impact on preparations for disaster response operations. In November 2003, CFNA personnel prepared a TTX focused on a cruise ship evacuating its passengers onto Herschel Island. The exercise exposed a lack of clarity on roles and responsibilities, particularly on which agencies should assume the lead and when, as well as communication and coordination issues (Exercise SWORDFISH IV, tabletop exercise conducted at the Arctic Security Interdepartmental Working Group meeting, November 2003). Another TTX in November 2019, which focused on three cruise ship-related scenarios (a missing passenger, a health outbreak, and a grounding incident), identified similar issues, particularly participants struggling to know who to contact and when (Tabletop exercise conducted at the ASWG meeting, November 2019). One participant observed that emergency management capacities "ebb and flow" in the North and "we need to do a better job keeping track of what's available." Another individual noted that we "can't do away with silos because of mandates, but we can be more aware of the silos around us and make them as transparent as possible" (Author's notes from hotwash for tabletop exercise conducted at the ASWG meeting. November 2019).

Through its support for and direction of the ASWG, JTFN has created the conditions necessary for the development of several core ingredients required for successful civil-military collaboration during disaster response operations, including strong interpersonal relationships, a belief in the value of cooperation, and the growth of formal and informal networks. While it has also provided a platform for the exchange of information regarding emergency management, it has not often disseminated the knowledge or strengthened the skills required to conduct domestic disaster response operations, including clarity on command and control and mutual understanding of roles, responsibilities, capabilities, and processes.

### **EXERCISING: NARWHAL AND NANOOK**

While the ASWG has not always built the practitioner competencies required to execute wholeof-government response operations, as Rob Huebert pointed out in his 2005-2006 assessment of the group, the relationship building and enhanced coordination it has fostered has served as a catalyst for joint exercises to work through how to conduct these responses (Huebert, 2005-2006). Between 2004 and 2007, CFNA and JTFN inserted components into Exercise NARWHAL (a training series that ran from 2002 to 2007) that were designed to test emergency management capabilities, including the simulation of major air disasters and a public health emergency (Canada Command, 2007). As a previous commander of JTFN, Brigadier-General Christine Whitecross, explained, "the genesis of Operation Narwhal came from [the] ASWG. It gave ... the opportunity to figure out how we co-operate together, who we call when something happens, where we are duplicating efforts, and where are the gaps in our capabilities" (as cited in Rochette, 2008, p. 30).

Over the last two decades, these exercises have grown in size and complexity, as well as in their involvement of civilian partners - a rarity in the Canadian context. "While there was some civilian inclusion in some of [the] CAF's exercises leading up to events studied here," Botha concluded in his study, "civilian and military participation in each other's exercises is not institutionalized and is viewed as something 'nice to do' rather than something that is fundamentally necessary" (2022, p. 156). In the north, JTFN has encouraged other federal departments, municipal, territorial, and Indigenous governments, and non-governmental organizations to participate in its emergency response exercises. After NARWHAL 2007, Brigadier General Whitecross suggested that this kind of collaborative exercise was a core requirement in the North, demonstrating the CAF's "ability to operate in a complex setting in a joint and integrated manner" (DND. 2007). As one JTFN member asserted, no other RJTF can match the number of civilian members consistently engaged in these northern exercises, the complexity of the scenarios, the frequency of these activities, and the high level of CAF involvement (Comment made during discussions at ASWG in Iqaluit, June 6-7, 2023).

In 2007, JTFN planned and executed the first iteration of Operation NANOOK (see Lackenbauer & Lajeunesse, 2017). Between 2007 and 2018, this annual operation included an integrated whole-of-

government emergency response component designed to establish a comfortable working relationship between key partners. Rebranded in 2018 as a year-round initiative, Operation NANOOK now encompasses various deployments, including NANOOK-TATIGIIT (meaning "together" in Inuktitut), which continues to practice whole-of-government responses to scenarios chosen by territorial governments (see Table 1).6

The overarching objective of the NANOOK exercises is to improve intergovernmental. interorganizational, and civil-military cooperation and coordination. From JTFN's perspective, the exercises allow it to plan and practice with its partners, improve interoperability, identify the issues that could act as a barrier to the CAF's deployment on disaster response operations, and determine how military assets could bridge OGDs' capability gaps. At the same time, JTFN and its federal partners use these exercises to highlight to the territories how other agencies could respond to certain events, "as opposed to automatic CAF engagement." Along these lines, achieving "stakeholder common understanding of the RFA process and procedures" has become a key objective (Brinkema, 2024). Territorial and municipal organizations generally use the exercises to develop a "common understanding of emergency operating procedures," validate emergency plans, improve on emergency operations centre functions, and practice specific response tasks, from urban search and rescue to the establishment of reception centres. These actors can also refine emergency management policies, processes, and procedures based on the lessons observed (Joint Task Force North [JTFN], 2012: Municipal and Community Affairs, 2018).

Given the scope of the exercises, their multi-faceted objectives, and the limited logistical support available in most northern communities, JTFN's planning process for them has always been complex. As Lackenbauer and Lajeunesse (2017) observed, during early iterations of NANOOK, OGDs often felt like military personnel did not adequately include them in planning processes, which, in turn, meant they had peripheral roles during the actual exercises. Although some improvements were made, OGD officials continued to point out that "the CAF still conducted the orchestra and the OGD, who would have to lead a response to real-world events, often remained

spectators or supporting players." After-action reports have indicated that, while JTFN has personnel dedicated to planning and executing training exercises, many OGDs lack the requisite budget and human resources and must participate in the training "off the side of their desks," representing a significant barrier to full participation (JTFN, 2012; JTFN, 2015; Lackenbauer & Lajeunesse, 2017).

In recent years, JTFN has sought to foster a "joint planning process" that is "integrated" and "inclusive," engaging with civilian partners earlier in the process and listening to their needs and concerns from the start (Comment made during discussions at the ASWG in Igaluit, June 6-7, 2023). Planning for NANOOK-TATIGIT begins more than a year in advance of the actual exercise. To facilitate the process, the exercise is generally held in whichever territory has assumed the co-chair of the ASWG, to create synergies between the two lines of effort (ASWG Planning Committee, 2017). While broad exercise ideas and concepts are discussed during ASWG meetings, the real work begins with regional outreach by JTFN and the stand-up of a joint operational planning group. In the year leading up to the exercise, military planners and their civilian counterparts work through multiple planning conferences and participate in detailed scenario writing board activities, which generally stretch over two to three days and are, at times, facilitated by private contractors (Calian Defence Solutions, n.d.).

Despite improvements to the planning process, issues remain. Public Safety Canada, for instance, is involved in planning and outreach efforts on an The department's overall inconsistent basis. involvement in the exercises has also fluctuated widely over the years. Further, territorial officials involved in recent exercise planning and preparation have asserted that it "doesn't always feel like a team effort," with some planners coming in with ideas and objectives that "don't necessarily match ours and don't necessarily reflect territorial realities." Greater effort is required to ensure an "integrated planning process from the very beginning," so that territorial participants do not feel "tacked on." Concern also exists about how lessons from past exercises and events are used to shape future activities. As one official asked, "What are we building off and building towards? ... What about the lessons from past exercises, even the ones held in [our territory]? Why aren't these used to shape the next

demonstrate presence and conduct surveillance in the North, in concert with partners and allies).

 $<sup>^6</sup>$  The other deployments are NUNALIVUT (a land component in the High Arctic), NUNAKPUT (focused on increasing presence and surveillance along the Northwest Passage), and TUUGAALIK (a maritime component to

exercises?" In the end, the two agreed that planning and executing the exercise "is a ton of work and time for all involved, and it needs to be more than a performance box to check off, which is sometimes how it feels" (Territorial emergency management officials, personal communication, August 8, 2024).

For its part, the Yukon government recently emphasized "[c]onsidering how to maximize the long-term benefits of each Operation NANOOK-TATIGIIT scenario should be a component of planning from the outset" (Government of Yukon, Executive Council Office, Intergovernmental Relations, 2023, p. 8).

**TABLE 1.**Emergency and disaster response exercise components of Operation NANOOK and NANOOK-TATIGIIT, 2007–2024.

Year	Scenario	Location
2007	Oil spill response exercise.	South Baffin, Nunavut
2008	Health emergency on a cruise ship, fuel spill, and mass rescue operation.	South Baffin, Nunavut
2009	Terrorist attack on storage tank containing jet fuel and compromised pipeline delivery manifold system, resulting in 300,000 litres of P50 diesel being released into Iqaluit inlet and Frobisher Bay.	Iqaluit, Nunavut
2010	Remediation of a community-level petrochemical leak.	Resolute Bay, Nunavut
2011	Major air disaster outside Resolute Bay.	Resolute Bay, Nunavut
2012	Request for assistance TTX, functional exercise working through notification and activation of emergency plans, and a full-scale exercise involving an accident between a barge and ferry on the Mackenzie River.	Various communities, NWT
2013	Response to a wildfire threatening Whitehorse and search and rescue of a sick child and his father on Resolution Island near Iqaluit.	Whitehorse, Yukon, and Resolution Island, Nunavut
2014	Search and rescue of a fishing boat in distress in Davis Strait and response to a 50-passenger cruise ship that experienced mechanical difficulties and ran aground in York Sound, requiring the CAF to deploy its major air disaster kit.	South Baffin, Nunavut
2015	Containment and remediation of a maritime fuel spill in Amundsen Gulf and response to a wildfire threatening Fort Smith and requiring community evacuation.	Ulukhaktok and Fort Smith, NWT
2016	Major response to an earthquake that severely impacted Haines Junction and moderately damaged Whitehorse. An aftershock occurred during the response efforts that isolated Haines Junction and surrounding communities.	Whitehorse and Haines Junction, Yukon, and adjacent areas
2017	Involved a response to a wide array of community emergencies, including a resupply disruption, HAZMAT/health hazard, mass casualty event, and industrial accident.	Rankin Inlet, Nunavut
2018	Wildfire response and community major air disaster (Exercise READY SOTERIA; JTFN was not the lead on this activity).	Yellowknife and Behchokò, NWT
2019	Wildfire response and evacuation, activation of the Canada-United States Civil Assistance Plan.	Whitehorse, Yukon
2020	Major maritime disaster but actual exercise cancelled due to COVID-19.	Iqaluit, Nunavut
2021	Major maritime disaster and mass rescue TTX.	Davis Strait, Nunavut
2022	TTX working through various territorial and community-level whole-of- government responses.	Yellowknife, NWT

2023	Command post exercise focusing on an ice storm causing extensive power infrastructure damage/outages/disruption during extreme cold temperatures. Scenario injects included unsafe roads, missing persons, the evacuation of Carmacks, and the unavailability of fuel, food, and potable water.	Whitehorse and Carmacks, Yukon
2024	Major power plant failure, water-pumphouse freeze up, targeted cyber-attack.	Chesterfield Inlet, Nunavut

Although there continues to be room for improvement in the planning and execution of NANOOK-TATIGIIT. these issues overshadow the benefits. The exercises have enhanced the ability of JTFN and the CAF to provide support to its civilian partners during domestic disaster response operations. In 2021, JTFN's commander, Brigadier-General Pascal Godbout (2021), emphasized the value the exercises have "brought to our work with our partners. Really developing that network, those connections, knowing who to talk to, understanding our respective capabilities, and knowing how to execute a contingency operation". Civilian partners have also acknowledged the role the exercises have played in preparing them to work with the military and other key actors during disaster events. In a note of thanks to the CAF after NANOOK-TATIGIIT 2023, the minister of community services for the Yukon, Richard Mostyn, stated, "I saw firsthand that this exercise had built relationships that will improve coordination and planning with our partner agencies and governments well ahead of an actual emergency. I heard candour and honest talk about gaps that emerged and how we are going to close them across all agencies" (Government of Yukon, 2023b).

NANOOK exercises have strengthened local and territorial emergency management capacities more broadly. NANOOK 2015, for example, provided incident command system training to interested territorial and federal agencies, as well as spill response training to community members in Ulukhaktok, which was "very well received and appreciated." Meanwhile, the CAF personnel that deployed to participate in wildfire response and evacuation activities in Fort Smith brought new solutions to the community's evacuation plan, including how best to communicate with residents during door-to-door checks and how information can be passed to and from municipal emergency management organizations (JTFN, 2015). In 2014, the director of NEM noted that the previous year's operation allowed the department to "test its specialized communications equipment emergency response" and "find our gaps ... [and] look

around and see what we might need." It was the kind of exercise that the Government of Nunavut did not have the resources to conduct – while NEM spent approximately \$40,000 on the exercise, the CAF spent \$10 million (Varga, 2014). Similarly, the Government of Northwest Territories (GNWT) used Operation NANOOK-TATIGIIT 2018 to test and revise a new territorial emergency plan, which it released a month after the exercise finished (Government of Northwest Territories [GNWT], 2020).

These military-led, whole-of-government exercises have become critical components of territorial emergency preparedness. An after-action review into the spring flooding that occurred in the NWT in 2021 called for the territorial emergency management organization (EMO) to plan and support "increased participation from all levels of government in territorial, regional and community mock and tabletop exercise events." In its response, the GNWT referenced the EMO's participation in NANOOK-TATIGIT every three years and its plans "to continue to expand GNWT and community participation in this activity" (GNWT, 2023, pp. ii, 14, 33, 35). Meanwhile, the Yukon government has identified NANOOK-TATIGIIT as "our most fruitful and visible security cooperation," indicating that its "opportunities for training and other positive legacy impacts" have provided "practical experience and raise[d] the knowledge and domain awareness of the Yukon" (Government of Yukon, Executive Council Office, Intergovernmental Relations, 2023, p. 8). Past exercises have served as "critical learning tools" and exposed problems in the Yukon's plans, protocols, and "cross-agency coordination" that the actors involved have gone on to address (Government of Yukon, 2023b).

### **LIAISON OFFICERS AND CANADIAN RANGERS**

JTFN's liaison officers play an essential role in facilitating the plans and preparations for Operation NANOOK-TATIGIIT – and are critical to the conduct of actual disaster response operations. As one member of JTFN explained, while the ASWG and its exercises help to build the civil-military connections and some of

the capabilities required for effective responses, "for operations, you need the liaison officers. They are the ones who can make things happen... Without them, things don't happen smoothly" (Federal member of the ASWG, personal communication, September 3, 2021). The literature on civil-military relations during domestic disaster response operations highlights the essential role these officers play as boundary spanners -"critical networkers" who "establish and maintain contacts, information conduits who facilitate data exchange, as well as organizational and domain experts with much relevant crisis management knowledge" (Kalkman, 2020, 234). The networks and relationships sustained by the work of liaison officers can also help create a sense of common purpose and dissolve an us-versus-them mentality (Botha, 2022, p. 141).

When JTFN was stood up in 2006, its commander, Colonel Norm Couturier, emphasized that the capacity of the detachments in the Yukon and Igaluit would be improved to assist with their liaison duties, particularly their "work with territorial and federal officials to develop better emergency response plans" (Bell, 2006). At the November 2007 ASWG meeting, officials from the Yukon emergency management organization highlighted the results of these efforts, noting the importance of the "strong relationship" they enjoyed with JTFN personnel based in the territory (Yukon Emergency Measures Organization, 2007). Between 2008 and 2010, JTFN commander Brigadier-General David Millar placed tremendous emphasis on the liaison role and the development of strong personal connections (Lackenbauer & Lajeunesse, 2017). This period even saw JTFN entering into discussions with GNWT officials about the establishment of an "executive liaison group," or "a standing forum for executive engagement to consider emergency planning or response issues which require the attention of this senior level." These plans, however, did not materialize (GNWT, 2008).

liaison officers Today, sustain ongoing relationships with the core federal and territorial actors involved in emergency management and sit on the emergency coordinating bodies in all three territories. During emergency events, they keep JTFN updated on territorial emergency response capabilities and requirements, while providing territorial EMOs with an understanding of possible CAF assistance during events (Federal member of the ASWG, personal communication, September 3, 2021; see also Carroll, 2021a). Generally, JTFN's liaison officers enjoy positive relationships with their civilian counterparts and maintain strong lines of communication through which to exchange information, create shared situational awareness, and facilitate responses (Federal member of the ASWG, personal communication, September 3, 2021).

Nevertheless, several issues have undermined the effectiveness of such liaison officers in the past. First. the emphasis placed on the liaison role has ebbed and flowed over the years, largely resulting from the approach and perspective of the JTFN commander. Commanders change every two to three years and can bring with them very different opinions on the importance of liaison officers (Federal member of the ASWG, personal communication, September 3, 2021). Second, the frequent turnover of military personnel at JTFN and the concomitant need to constantly rebuild liaison relationships can be challenging (Federal member of the ASWG, personal communication, September 3, 2021). Third, given the small size of JTFN's detachments, there are few alternatives if interpersonal issues arise and officers and their civilian partners clash or do not work well together (Territorial emergency management officials, communication, August 8, 2024). Fourth, issues have arisen in the past when liaison officers "have not stayed in their wheelhouse" and "have really overstepped" in their actions, such as attempting to bypass their civilian emergency management partners (Territorial emergency management officials, personal communication, August 8, 2024). Finally, while liaison officers maintain good relationships at the territorial level, they often have fewer connections with regional, Indigenous, and municipal governance bodies, which can limit their effectiveness during response operations (Federal member of the ASWG, personal communication, September 3, 2021).

While liaison officers can struggle to extend their networks to the local level, the Canadian Rangers often serve to fill this gap for JTFN. Canadian Ranger patrols consist of part-time Reservists who are part of relationships, groups, and networks that span the social breadth of their communities. As a patrol member from Kugluktuk explained,

Rangers wear a lot of hats. We are in local government, hunter and trappers' organizations, Coast Guard Auxiliary units, housing associations. We are coaches. We volunteer at community events. We have coffee with Elders. We go to church. We run bingo. We work with a lot of different people. (Member of the Kugluktuk Ranger

Patrol, personal communication, October 20, 2019)

The intersection of multiple social networks in a patrol ensures that Rangers know most or all community members, including the key local players involved in emergency response. When outside agencies, including the CAF, respond to local emergencies and disasters, Ranger patrols provide a ready entry point into communities and offer immediate access to extensive local networks, all of which facilitates response activities (Kikkert & Lackenbauer, 2021).

# THE IMPACT OF JTFN'S EFFORTS ON DOMESTIC DISASTER RESPONSE OPERATIONS IN THE NORTH

The first major test of JTFN's efforts to prepare for disaster response operations came in August 2011 with the crash of First Air Flight 6560, a Boeing 737-200 that crashed on landing at Resolute Bay, Nunavut, killing 12 of the 15 people on board and severely injuring the three survivors. Fortuitously, elements of JTFN, hundreds of CAF personnel, and civilian partners were already deployed in Resolute prior to the crash as part of the Operation NANOOK 2011 whole-ofgovernment exercise simulating a major air disaster outside the community. Consequently, military personnel were able to respond to the crash almost immediately, working closely with their civilian counterparts. An after-action report applauded the "good collaborative planning process for Op Nanook Phase 4 which enabled a good coordinated response for the First Air [Flight] 6560 incident" ("Lessons Learned," n.d.).

Despite the time and energy that JTFN expended working with its civilian partners to prepare for a major air disaster exercise, serious civil-military issues still arose during the response. Many JTFN and CAF personnel were unaware of the contingency plans, operating processes, and procedures of territorial and federal partners and vice versa, making it difficult to function in an "integrated operations environment" (Canada Command, 2012). The military also complications exchanging secure encountered information with its partners, with communication issues inhibiting shared situational awareness. Both military and civilian agencies had to do a better job "anticipat[ing] requirements during a crisis response. Improved interoperability should begin standardized terminology that would enhance the functioning of a fused emergency response centre, whereby immediate clarifications could be achieved in any instances of inadvertent confusion" (JTFN, 2011). A lack of awareness about the processes needed to request the CAF's assistance, including the need to rapidly transition verbal requests into written form, caused confusion. Finally, JTFN found it difficult to quickly identify local emergency response resources and capacity in the community, highlighting the limits of the networks that its liaison officers had formed (Canada Command, 2012; JTFN, 2011).

Subsequent ASWG meetings and NANOOK exercises offered ample opportunities to work through the civil-military issues that had arisen during the First Air crash. During the long response to the COVID-19 pandemic, JTFN liaison officers were embedded in the Yukon's emergency coordination committee (ECC) and the NWT's territorial emergency management organization from the onset of Operation LASER (the CAF's pandemic response) in April 2020. JTFN activated Ranger patrols to provide assistance at the community level, provided planning support for vaccine distribution, and worked with the Royal Canadian Air Force to deliver five medical-grade lowtemperature freezers (-35°C) to the Yukon and Nunavut as part of Operation VECTOR (DND, 2024a; DND, 2024b; Government of Yukon, 2020). A review of these efforts at the November 2020 meeting of the ASWG noted how "pre-existing working relationships" had culminated in generally effective communication and coordination between key actors (ASWG, 2020). Nonetheless, civilmilitary challenges arose in sustaining consistent communications and shared situational awareness throughout the duration of the pandemic. A second issue revolved around limited local and territorial understanding of the possible roles, capabilities, and limitations of the Canadian Rangers, which generated confusion and highlighted the need for continued education regarding the activities that Rangers could and could not perform (Federal member of the ASWG, personal communication, September 3, 2021).

During the response to COVID-19, three major incidents (one in each territory) required assistance from JTFN and the CAF, with two culminating in the first deployment of Operation LENTUS in the territorial North. The first incident occurred in the NWT in May 2021, when the territory experienced its worst flood season on record, with flooding in multiple communities and the evacuation of hundreds of residents (GNWT, 2023). On Friday, 14 May, Fort Simpson's senior administrative officials asked the GNWT to secure the support of approximately 30 military personnel – either Rangers or a combination of Rangers and other CAF members – to support the

community and provide the human power required to start the recovery process (Whitehouse, 2021). That day, the GNWT submitted a request for assistance for an unspecified number of Rangers to support the remaining high-risk communities experiencing river breakup conditions, while noting that, due to COVID-19 concerns, it did not want the deployment of southernbased assets into the territory (Whitehouse, 2021). The request for Ranger assistance "was approved on May 15 to provide for a six-week period until June 25, with a reassessment to take place after the initial period to determine the continued need" (Sibley, 2021a). In Fort Simpson, the actual physical response amounted to two Canadian Rangers from the community's own patrol employed from 15 to 18 May. The small number of Rangers and the length of time they were deployed led to critiques from local leadership about the military's willingness and capacity to respond (Desmarais, 2021; Sibley, 2021a).

While the territorial after-action review on the flood response ignored civil-military dynamics, media reports and government statements exposed critical issues during the incident. The GNWT's Municipal and Community Affairs (MACA) department alluded to some of these problems in the immediate aftermath of the floods, noting that the Fort Simpson situation had "made it aware that there were gaps in the formal communication on the status of Rangers during the flood response" (Sibley, 2021a). Throughout the situation, local and territorial officials expressed confusion over the roles and capabilities of the Canadian Rangers. They did not understand that the Rangers were not self-sustaining and could not be deployed away from their communities, and they expected that the military could provide long-term assistance during the recovery process facing the communities. The fact that any self-sustaining troops available to JTFN would have to come from the South also seemed to surprise MACA. Meanwhile, territorial officials passed on little information to the communities about the military's capabilities and limitations (see Carroll, 2021b; Desmarais, 2021; Sibley, 2021a, 2021b). Further, rather than set specific tasks for the Rangers, territorial emergency management officials largely left that to local governments, which had significantly less experience working with the military. This left individual Rangers in a position of explaining to local officials why they could not undertake a specific task. According to the mayor of Fort Simpson, "there was confusion among all parties involved regarding 'what the military's role or capacity would be during an emergency" (Sibley, 2021a).

Some of these gaps indicate that JTFN did not use its liaison role to "lean forward" during the crisis to anticipate the GNWT's need for CAF assistance and educate territorial officials on what services it could provide. Issues also resulted from JTFN's limited liaison networks at the regional and local levels. Each of the five regions of the NWT has an emergency operations centre that is responsible for managing emergencies and coordinating with communities. While JTFN had a liaison officer working at the territorial level, it did not have officers at the regional level. "One significant lesson learned is the need for a JTFN Liaison Officer at the Regional EMO level," one federal member of the ASWG reflected, "which has been acted upon." This improved civil-military coordination assisted in linking JTFN to the regional and local levels and "made things much easier to ensure the tasks Rangers get are the ones they can actually execute" (Federal member of the ASWG, personal communication, September 3, 2021).

Operation LENTUS in the Yukon in 2021 offers a more positive case study. Through the spring and summer, the Government of Yukon mounted the largest emergency response in its history to manage the impacts of flooding in the Southern Lakes region. As the situation intensified throughout June, the territorial government maintained frequent contact with Public Safety Canada and other federal partners, including JTFN. The Yukon expended all of its emergency response resources and tapped into the private sector to support its efforts. When the situation escalated in early July, the Government of Yukon requested federal assistance on 3 July, and, three days later, over 100 CAF personnel deployed to the territory. From 5 July to 2 August, they filled and moved sandbags, assisted persons affected by the floods, conducted wellness checks, protected critical infrastructure and transportation routes, and assisted with evacuations (Desmarais, 2021).

By all accounts, civil-military relations were excellent throughout the incident, marked by early coordination, a well-crafted RFA, and efficient integration of the CAF's resources into territorial response efforts. The Yukon government explained that "[o]ur relationships with the JTFN, local CAF staff in Yukon, and Public Safety Canada led to wellcoordinated and timely briefings, meetings, and interventions that saved critical infrastructure and from significant private property damage" (Government of Yukon, Executive Council Office, Intergovernmental Relations, 2023, p. 12). Once the CAF unit arrived, "the territorial EMO in the Yukon

coordinated all task requests that the CAF undertook exactly as it should" (Federal member of the ASWG, personal communication, September 3, 2021). While deployed, the military worked under the direction of the Yukon's incident management team in the Southern Lakes, while each military unit had a civilian supervisor who was either a territorial wildfire fighter or a member of the Alberta Disaster Response Team (Canada Task Force 2), who provided daily objectives and guidance (Lennips, 2021). Damien Burns, Assistant Deputy Minister of Protective Services in the Yukon, explained the benefits of working with the CAF during this deployment: it was able to "take this whole problem away from us from a logistics, operations and management sense," because "they're there for us, they're trained in the way we need them to [be], to come and integrate into our system, and they are plugging those holes that we can't" (Burns, 2022).

While JTFN facilitated Operation LENTUS in the Yukon, it continued to work with its civilian partners on Operation NANOOK-TATIGIT 2021, which focused on a cruise ship incident in Nunavut. The day before the exercise was scheduled to take place, however, the Igaluit Water Crisis escalated into a critical situation. In October 2021, testing identified the presence of hydrocarbons in Igaluit's water supply, which were eventually traced to the city's water treatment plant. For nearly two months, city residents went without clean tap water, with the city placed on a do-notconsume order. Residents gathered water from the Sylvia Grinnell River, while between October and December 2021, more than 1.5 million litres of bottled water were procured and shipped to Igaluit on 39 chartered flights (DPRA Canada, 2023). Given that most of the "main players were already working through the [NANOOK] exercise[,] they easily switched to real discussions with partners" about federal assistance, including the support that JTFN/the CAF and other federal agencies could provide (Discussion at the ASWG, November 25, 2021). This involved a clear assessment of what the military's Reverse Osmosis Water Purification Units (ROWPUs) could accomplish. These discussions shaped the territorial RFA submitted by Nunavut's Community and Government Services (CGS) department on 20 October 2021, which asked the federal government "to deploy water treatment assets and personnel to Igaluit to support access to potable water in the community" (Discussion on the Iqaluit Water Crisis at the ASWG, June 6, 2023).

On 21 October, JTFN and the CAF were tasked to supply two ROWPUs and the required operators (over 20 military personnel). A day later, JTFN personnel, with assistance from CGS, set about identifying potential sites for the deployment of its ROWPUs. It was difficult to find facilities to work in, "but the [JTFN] detachment in Igaluit was a key enabler ... we were able to plug into those relationships." On-the-ground relations between JTFN/CAF personnel and their civilian CGS partners were very good as they attempted to locate a suitable site, find solutions to the austere environmental conditions they faced, and navigate the logistical issues involved with transporting the water produced by the ROWPUs (Territorial emergency management official, personal communication, November 20-22, 2022). Eventually, the military and CGS settled on a site at the Sylvia Grinnell River. Throughout the deployment, JTFN had frequent meetings with Public Safety Canada, Nunavut Emergency Management, and other Community Government Services officials, ensuring effective collaboration between those partners (Discussion on the Igaluit Water Crisis at the ASWG, June 6, 2023).

Three weeks passed from the receipt of the RFA to running ROWPU water. During this deployment, JTFN was caught up in a disagreement between CGS and the City of Igaluit, which did not believe that the level of risk required the military's assistance and felt that the territorial government had overstepped and was being overly prescriptive. City officials perceived "Operation LENTUS as an unnecessary distraction from remediation efforts at the Igaluit WTP [water treatment plant]. The City preferred, instead, to continue filling its water trucks at the Sylvia Grinnell River." They were also skeptical that the ROWPUs could provide adequate drinking water, disagreed with the military and CGA on where to situate the units, and worried about "the concentration of chemicals in, and means of disposing of, the wastewater produced by the ROWPU[s]." Throughout the crisis, disjointed communication and coordination between the two civilian entities slowed the military's process (DPRA Canada, 2023, pp. 21, 26). Without the City's support, progress stalled, and, although JTFN attempted to alleviate concerns with a formal letter, the City only permitted the military to commence operations at the Sylvia Grinnell River site on 31 October. 7 Between 7 November, when the ROWPUs became operational, and 10 December, when the do-not-consume order was lifted, Operation

treated water through the City's water trucks. Operation LENTUS would continue to produce treated water until 23 November, when a winter storm

On 1 November, JTFN started setting up its ROWPUs at the Sylvia Grinnell River. On 7 November, Operation LENTUS distributed 27,000 litres of

LENTUS produced and distributed a total of 371,650 litres of treated water for Igaluit residents through the City's water trucks. Unfortunately, the coordination and communication issues between the City of Igaluit and the Government of Nunavut departments "may have contributed to some Igaluit residents' hesitation to consume treated water produced by Operation LENTUS" (DPRA Canada, 2023, pp. 25, 33). While JTFN was caught in a turf war between CGS and the City of Igaluit, personnel involved still identified several critical lessons that would have improved civil-military relations during the crisis. JTFN needed to better understand the roles and responsibilities of the civilian actors involved in the incident, including with which entities they would have to partner closely. With a better understanding of who was responsible for what, JTFN personnel could have done a better job developing and maintaining clear horizontal and vertical lines of communication with key stakeholders. This approach may have allowed them to more guickly alleviate concerns about the ROWPU process and work through logistical and operational disagreements (Discussion on the Igaluit Water Crisis at the ASWG, June 6, 2023). The Igaluit Water Crisis again seemed to indicate that the liaison network established between JTFN and its civilian counterparts did not extend adequately to the local level.

Despite JTFN's efforts through the ASWG, response exercises, and liaison networks to build the conditions necessary for effective cooperation across the complex jurisdictional landscape of the territorial North, common civil-military issues emerged during its responses to the crash of First Air Flight 6560, the COVID-19 pandemic, the 2021 NWT floods, and the Igaluit Water Crisis. These include conceptual differences around the RFA and the end state of military assistance, difficulties with the exchange of information, interoperability, and command and control, as well as a limited mutual understanding of roles, responsibilities, capabilities, and processes. While we recognize the territorial-municipal dynamics at play during the water crisis, the City of Igaluit's response also seemed to indicate a limited belief in the value of civil-military cooperation and a low degree of trust. Conversely, civil-military collaboration during the 2021 Yukon flood response appears to have been seamless.

This article has argued that the CAF – specifically Canadian Forces Northern Area and its successor, Joint Task Force North – has strengthened its whole-of-government disaster response operations in the North. Still, we have identified significant areas for improvement in each of the military's primary efforts to improve intergovernmental and interorganizational collaboration in the region, namely the Arctic Security Working Group, liaison officers, the Canadian Rangers, and its annual large-scale response exercises.

JTFN is already working on some of these issues. In reviewing the CAF's response to the 2021 incidents in the North, JTFN's commander, Brigadier-General Godbout, reflected that "JTFN and its partners operating in the North must work on the contingency operation planning process itself beyond NANOOK to better prepare for events in which communities and territorial government[s] have very short periods of time to assess the situation and request the military's assistance to ensure support arrives in time" (Godbout. 2021). To operate at the speed of trust, Team North requires more joint planning and practice. JTFN has attempted to strengthen its liaison efforts, while the ASWG has taken steps to act on some of the lessons identified during the 2021 incidents. In its November meeting that year, for instance, it adopted the theme "Community Safety: Preparedness, Resilience and Recovery," which included detailed discussions of the RFA process, how private sector resources can be used in disaster response and recovery, and best practices in community evacuation.

To assist in improving civil-military collaboration in northern disaster response, additional research is required into the lessons observed from each NANOOK-TATIGIIT exercise, to determine how effectively they have been translated into lessons learned, and to identify outstanding areas for improvement. Further research is also needed into how the ASWG can play a more substantive role in building the competencies required for on-the-ground civil-military coordination. Furthermore, work remains to identify how JTFN can move from a whole-of-government approach to a more inclusive whole-of-society approach that would allow the CAF to improve its connections and navigate the increased complexity that these additional entities bring.

CONCLUSION

damaged some equipment and forced JTFN to suspend operations for a second time. Consequently, JTFN shut down its ROWPUs and moved its operations to a forward operating facility at the Iqaluit airport. Rather than

risking further equipment damage and additional interruptions, JTFN opted to operate the ROWPUs from inside this facility.

A broader question should be considered: is JTFN the right organization to be leading federal-territorial emergency response exercises and engagement in the North (Federal member of the ASWG, personal communication, September 3, 2021)? The military has taken on this important role for over two decades, providing a capability where none existed and taking on a responsibility no other federal agency wanted. Moving forward, serious thought should be given to whether Public Safety and Emergency Preparedness Canada should be leading federal lines of effort or, at least, playing more of an equal partner role in planning for NANOOK-TATIGIIT.

Regardless of the specific role that JTFN plays in the years ahead, improved civil-military cooperation is essential as the hazards facing the territorial North continue to increase in size and frequency. Canada's April 2024 defence policy update reaffirmed the CAF's commitment to "establishing greater presence, reach, mobility, and responsiveness in the Arctic and North to deal with disasters, threats, and challenges to our sovereignty" (DND, 2024c, p. 4). This recommendation supports the priorities of the Government of Canada's Arctic and Northern Policy Framework (September 2019), which highlights the importance of relationship building and engagement between the CAF and northern communities and, more generally, emphasizes strengthening the region's whole-ofsociety emergency management capabilities (Crown-Indigenous Relations and Northern Affairs Canada, 2019). The unique operating challenges in the region, compounded by the limited local and territorial resources, mean that the CAF will continue to be called upon - as it was during the evacuation of Yellowknife in 2023 due to forest fires. It must be ready.

### **REFERENCES**

- Ahmed, K., Emdad Haque, C., Agrawal, N., & Sakib, S. (2023, May).
  Nature-triggered disasters and the involvement of armed forces: Exploring a civil-military collaborative framework.
  Canadian Journal of Emergency Management, 3(1), 64–89.
  <a href="https://cdnjem.ca/wp-content/uploads/2023/05/CJEM-RCGU-31.pdf">https://cdnjem.ca/wp-content/uploads/2023/05/CJEM-RCGU-31.pdf</a>
- Arctic Security Working Group. (2012). Terms of reference.
- Arctic Security Working Group. (2020, November). Pandemic responses: Territorial public health efforts and complementary federal support [Panel discussion]. Arctic Security Working Group.
- Arctic Security Working Group Planning Committee. (2017, May 11). [Presentation]. Arctic Security Working Group.
- Bell, J. (2006, May 26). Northern forces to beef up emergency response work. *Nunatsiaq News*. <a href="https://nunatsiaq.com/stories/article/northern\_forces\_to\_beef\_up\_emergency\_response\_work/">https://nunatsiaq.com/stories/article/northern\_forces\_to\_beef\_up\_emergency\_response\_work/</a>
- Bollen, M., & Kalkman, J. P. (2022, Spring). Civil-military cooperation in disaster and emergency response: Practices, challenges, and opportunities. *Journal of Advanced Military Studies*, *13*(1), 79–91. https://doi.org/10.21140/mcui.20221301004
- Botha, J. (2022). Boots on the ground: Disaster response in Canada. University of Toronto Press.
- Brinkema, S. (2024, May 30). *Op Nanook Tatigiit 2024: Planning update* [Presentation]. Arctic Security Working Group.
- Burns, D. (2022, May 18). [Presentation]. Standing Committee on National Defence. https://www.ourcommons.ca/documentviewer/en/44-1/NDDN/meeting-23/evidence
- Calian Defence Solutions. (n.d.). Synthetic training environments:

  Evolving simulation-based training for high-readiness exercises. Calian Defence Solutions.

  https://www.calian.com/resources/white-papers/synthetic-training-environments-evolving-simulation-based-training-for-high-readiness-exercises/.
- Canada Command. (2007, April 16). Backgrounder Exercise NARWHAL series. Government of Canada. https://www.canada.ca/en/news/archive/2007/04/backgrounder-exercise-narwhal-series.html
- Canada Command. (2012, March 31). Lessons identified for Operation Nanook 11. A-2021-00824.
- Carroll, L. (2021a, August 25). Local Canadian Rangers activated to respond to Sahtú COVID outbreak. CKLB Radio.
- Carroll, L. (2021b, May 14). Stressed, tired but sticking together: Fort Simpson residents brave the uncertain. CKLB Radio.
- Cox, R. S. (2014, July). Disaster preparedness in Canada's North: What's resilience got to do with it? *Northern Public Affairs*, 2(3), 43–45.
- Crown-Indigenous Relations and Northern Affairs Canada. (2019).

  Arctic and Northern Policy Framework: Safety, security, and defence chapter. Government of Canada.

- https://www.rcaanccirnac.gc.ca/eng/1562939617400/1562939658000
- Dahlberg, R., Vendelø, M. T., Sørensen, B. R., & Lauta, K. C. (2020).

  Offshore is onshore: Scalability, synchronization, and speed of decision in Arctic SAR. Scandinavian Journal of Military Studies, 3(1), 157–168. https://doi.org/10.31374/sjms.52
- Department of National Defence. (n.d.). Domestic and continental security. Government of Canada. https://www.canada.ca/en/department-national-defence/corporate/reports-publications/proactive-disclosure/nddn-23-november-2023/domestic-and-continental-security.html
- Department of National Defence. (2007, April 27). CF operation demonstrates value of interagency cooperation in Canada's Arctic. Government of Canada. https://www.canada.ca/en/news/archive/2007/04/cf-operation-demonstrates-value-interagency-cooperation-canada-arctic.html.
- Department of National Defence. (2018, April 7). Joint Task Force
  North. Government of Canada.
  https://www.canada.ca/en/department-nationaldefence/services/operations/militaryoperations/conduct/regional-task-force/north.html
- Department of National Defence. (2024a, May 28). Operation LASER. Government of Canada. https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/laser.html
- Department of National Defence. (2024b, May 28). Operation VECTOR. Government of Canada. https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-vector.html
- Department of National Defence. (2024c). Our North, Strong and Free: A renewed vision for Canada's defence. Minister of National Defence. <a href="https://www.canada.ca/en/department-national-defence/corporate/reports-publications/north-strong-free-2024.html">https://www.canada.ca/en/department-national-defence/corporate/reports-publications/north-strong-free-2024.html</a>
- Desmarais, A. (2021, July 8). Why the military's response to flooding in Yukon is so different from the N.W.T. CBC News. https://www.cbc.ca/news/canada/north/nwt-yukon-military-flooding-1.6093469
- DPRA Canada. (2023, May 17). Emergency measures review 2021:

  Water contamination incident in Iqaluit Report prepared for

  Kyle Seeley, Deputy Minister, Department of Community and

  Government Services.

  https://assembly.nu.ca/sites/default/files/2023-10/Dept\_of

  CGS Emergency Measures Review 2021 Water

  Contamination Incident in Iqaluit EN\_0.pdf
- Fort McMurray wildfire: Northern similarities. (2016, November 30). [Presentation]. Arctic Security Working Group.
- Fremis, A. (2021). Operation LENTUS and you An emergency manager's guide to the CAF. Canadian Journal of Emergency Management, 1(2), 64–75. https://doi.org/10.25071/3cf50m34
- Funston, B. (2009). Emergency preparedness in Canada's North: An examination of community capacity. Northern Canada Consulting. <a href="https://gordonfoundation.ca/wp-content/uploads/2017/03/2014">https://gordonfoundation.ca/wp-content/uploads/2017/03/2014</a> Bernard EmergencyPrepa rednessCanadasArctic\_WEB.pdf

- Godbout, P. (2021, July 22). A view from Yellowknife, NWT JTFN:
  Enhancing security through regional collaboration [Arctic E-Talk]. Center for Arctic Security and Resilience (CASR).
  https://www.uaf.edu/casr/activities/etalks\_jul\_2021.php
- Government of the Northwest Territories. (2008, May 13–14). Emergency measures organization update to the Arctic Security Working Group [Update]. Arctic Security Working Group.
- Government of the Northwest Territories. (2020, November). [Presentation]. Arctic Security Working Group.
- Government of the Northwest Territories. (2023, June). 2021 spring flooding after action review. Government of the Northwest Territories. https://www.maca.gov.nt.ca/sites/maca/files/resources/2021\_spring\_flooding\_after\_action\_review.pdf
- Government of Yukon. (2020, December 1 & 8). COVID-19 Facebook live update: December 1 and 8, 2020. Government of Yukon. <a href="https://yukon.ca/sites/yukon.ca/files/eco/eco-live-update-transcript-december-1-2020.pdf">https://yukon.ca/sites/yukon.ca/files/eco/eco-live-update-transcript-december-1-2020.pdf</a>
- Government of Yukon. (2023a, October 26). Operation NANOOK-TATIGIIT enhances Yukon's emergency preparedness. Government of Yukon. <a href="https://yukon.ca/en/news/operation-nanook-tatigiit-enhances-yukon-emergency-preparedness">https://yukon.ca/en/news/operation-nanook-tatigiit-enhances-yukon-emergency-preparedness</a>
- Government of Yukon. (2023b, October 31). Statement from Minister Mostyn on success of Operation NANOOK-TATIGIIT.

  Government of Yukon. https://yukon.ca/en/news/statement-minister-mostyn-success-operation-nanook-tatigiit
- Government of Yukon, Executive Council Intergovernmental Relations. (2023, January Government of Yukon submission Senate Standing Committee on National Security, Defence and Veterans Affairs' study on issues relating to security and defence in Arctic. Government of Yukon. https://sencanada.ca/Content/Sen/Committee/441/SECD/ briefs/2023-01-12\_SECD\_Brief\_YukonGov\_e.pdf
- Hartwick, C. R. (2020–2021). Survive, sustain, and manoeuvre: A look at the Canadian Armed Force's [sic] ability to respond and counter Arctic threats [Master of Defence Studies Research Project]. Canadian Forces College. https://www.cfc.forces.gc.ca/259/290/23/286/Hartwick.p df
- Hudson, J. A. (2021). Confronting climate change: The Canadian Army and domestic operations [Monograph]. School of Advanced Military Studies, US Army Command and General Staff College. <a href="https://apps.dtic.mil/sti/trecms/pdf/AD1161081.pdf">https://apps.dtic.mil/sti/trecms/pdf/AD1161081.pdf</a>
- Huebert, R. (2005–2006, Winter). Renaissance in Canadian Arctic security? Canadian Military Journal, 17–30. http://www.journal.forces.gc.ca/vo6/no4/doc/north-nord-eng.pdf
- Joint Task Force North. (2011, December 2). After-Action report, response to First Air Crash. A-2021-00824.
- Joint Task Force North. (2012, May 30). *Op Nanook 2012* [Presentation]. Arctic Security Working Group.

- Joint Task Force North. (2015). *Op Nanook 2015*. Arctic Security Working Group.
- Kalkman, J. P. (2019). The expanding domestic role of Western armed forces and its implications. Journal of Homeland Security and Emergency Management, 16(1). https://doi.org/10.1515/jhsem-2018-0052
- Kalkman, J. P. (2020). Boundary spanners in crisis management. International Journal of Emergency Services, 9(2), 233–244. https://doi.org/10.1108/IJES-08-2019-0042
- Kikkert, P. (2021, December 8). Creating a non-military disaster workforce must be part of Canada's climate change response.

  North American and Arctic Defence and Security Network Policy Brief. <a href="https://www.naadsn.ca/wpcontent/uploads/2021/12/21-dec-Kikkert-Disaster-Workforce-Policy-Brief.pdf">https://www.naadsn.ca/wpcontent/uploads/2021/12/21-dec-Kikkert-Disaster-Workforce-Policy-Brief.pdf</a>
- Kikkert, P., & Lackenbauer, P. W. (2021). The Canadian Rangers: Strengthening community disaster resilience in Canada's remote and isolated communities. *The Northern Review,* (51), 1–33. https://doi.org/10.22584/nr51.2021.003
- Lackenbauer, P. W., & Lajeunesse, A. (2017). The emerging
  Arctic security environment: Putting the military in its
  (whole of government) place. In P. W. Lackenbauer & H.
  Nicol (Eds.), Whole of government through an Arctic lens
  (pp. 1–36). Mulroney Institute of Government.
  http://operationalhistories.ca/wp
  - content/uploads/2018/05/Whole-of-Government-throughtan-Arctic-Lens-eBook.pdf
- Lauta, K. C., Vendelø, M. T., Sørensen, B. R., & Dahlberg, R. (2018).

  Conceptualizing cold disasters: Disaster risk governance at the Arctic edge. *International Journal of Disaster Risk Reduction*, 31, 1276–1282. https://doi.org/10.1016/j.ijdrr.2017.12.011
- Lennips, J. (2021, August 20). Troops wrap up deployment to Yukon in Support of Op Lentus. Canadian Military Family. https://www.cmfmag.ca/troops-wrap-up-deployment-to-yukon-in-support-of-op-lentus/
- Lessons Learned, First Air 6560. (n.d.). A-2021-00824.
- MacGregor, D. S. (2012). Canadian Forces domestic operations: Are we ready to make Canada first? [Master of Defence Studies Research Project]. Canadian Forces College. https://www.cfc.forces.gc.ca/259/290/298/286/macgregor.pdf
- Minutes of the Arctic Security Interdepartmental Working Group meeting. (2004, November 17–18).
- Municipal and Community Affairs. (2018, September 24).
  - ${\it Government of the Northwest Territories participation in}$
  - Operation NANOOK-TATIGIIT 2018. Government of the
  - Northwest Territories.
  - https://www.gov.nt.ca/en/newsroom/news/government-

- northwest-territories-participation-operation-nanook-tatigiit-2018
- Munk-Gordon Arctic Security Program. (2014, March). National Roundtable on Arctic Emergency Preparedness: Report of proceedings. Munk-Gordon Arctic Security Program. <a href="https://gordonfoundation.ca/wp-content/uploads/2017/03/2014\_NationalRoundtableReport\_WEB.pdf">https://gordonfoundation.ca/wp-content/uploads/2017/03/2014\_NationalRoundtableReport\_WEB.pdf</a>
- Nunavut Emergency Management. (2009, May). [Update]. Arctic Security Working Group.
- Public Safety Canada. (2024, August 9). Requests for federal assistance. Government of Canada. https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/rspndng-mrgnc-vnts/gvrnmnt-prtns-cntr/rqst-fdrl-sstssnc-en.aspx
- Rochette, J. G. C. Y. (2008, May). Northern lights: Implementing lasting changes in the North before the sun sets. Canadian Forces

  College. https://www.cfc.forces.gc.ca/259/281/280/rochette.pdf
- Rock, J. D. H. (2021). The Canadian Armed Forces and domestic operations: Unbalanced and overstretched? [Master of Defence Studies Research Project]. Canadian Forces College. https://www.cfc.forces.gc.ca/259/290/23/286/Rock.pdf
- Role of Public Safety Canada and request for federal assistance. (2018, May 10). [Presentation]. Arctic Security Working Group.
- Russell, I. (2009, March). Intergovernmental cooperation and coordination within Canadian disaster and emergency management: What makes it work? [Master's thesis]. Royal Roads

  University. https://www.collectionscanada.gc.ca/obj/thesescanada/voll2/002/MR50428.PDF?is\_thesis
- Saul, D. (2019, Summer). Domestic military disaster mitigation: A new approach. *Canadian Military Journal*, 19(3), 45–50. https://publications.gc.ca/collections/collection\_2019/md n-dnd/D12-8-19-3-eng.pdf
- Shadwick, M. (2018, Autumn). The Canadian Armed Forces and humanitarian assistance and disaster relief (HADR). Canadian Military Journal 18(4), 76–83. http://www.journal.forces.gc.ca/vol18/no4/PDF/CMJ184Ep76.pdf
- Sibley, S. (2021a, June 16). Fort Simpson requested the military's help. Two people showed up. Cabin Radio. https://cabinradio.ca/65675/news/dehcho/fort-simpson-requested-the-militarys-help-two-people-showed-up/
- Sibley, S. (2021b, May 11). Fort Simpson water drops slightly as hundreds remain displaced. Cabin Radio. https://cabinradio.ca/62766/news/environment/fort-simpson-water-drops-slightly-as-hundreds-remain-displaced/
- Standing Committee on National Defence. (2024, June). Providing aid to the civil power: Disaster relief and the Canadian Armed Forces' domestic operations. House of Commons.

- https://www.ourcommons.ca/Content/Committee/441/ND\_DN/Reports/RP13213083/nddnrp13/nddnrp13-e.pdf
- Tatham, P., & Rietjens, S. B. (2016). Integrated disaster relief logistics: A stepping stone towards viable civil-military networks? *Disasters*, 40(1), 7–25. https://doi.org/10.1111/disa.12131
- Team Interoperability. (2002, May 28–30). [Presentation]. Arctic Security Interdepartmental Working Group.
- Team Interoperability. (2003, November). [Presentation]. Arctic Security Interdepartmental Working Group.
- Thomas, D. (2014). The Canadian Forces, domestic operations, and public confidence: Are good luck and tactical competence still good enough? [Master of Defence Studies Research Project].

  Canadian Forces College. https://www.cfc.forces.gc.ca/259/290/296/286/thomas.pd f
- Varga, P. (2014, August 11). Op Nanook scenario preps Nunavut for cruise ship mishaps. *Nunatsiaq News*. https://nunatsiaq.com/stories/article/65674op\_nanook\_sc\_enario\_preps\_nunavut\_for\_cruise\_ship\_mishaps/
- Whitehouse, S. (2021, May 15). Fort Simpson calls for military assistance as water levels exceed 16 metres. NNSL. https://www.nnsl.com/nwtnewsnorth/fort-simpson-callsfor-military-assistance-as-water-levels-exceed-16-metres/
- Yukon Emergency Measures Organization. (2007, November). [Presentation]. Arctic Security Working Group.