

Canadian Search and Rescue Puzzle: The Missing Pieces

by Jean G.R. Leroux

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Introduction

hortly past midnight on a stormy night in February 1982, a mayday was sent from the oil platform Ocean Ranger on the Grand Banks of Newfoundland. Minutes later, the Ocean Ranger sank with its entire crew of 84, all onboard perishing. Immediately following the tragedy, a royal commission was convened. The commission highly criticized the integration of SAR services. A key finding stated that "the stubborn fact remains that there is no single functioning agency with

the mandate to knit together the several components into a comprehensive national SAR program." Fast forward 30 years... A report from the Auditor General of Canada evaluating the Canadian Search and Rescue (SAR) system echoed similar comments: "In spite of the many reports and recommendations for a national SAR policy, we found that there is still no such policy.... [T]he National Search and Rescue Secretariat (NSS) has made efforts over the years to establish a governance framework, but it has not been successful."

The take-away from these reports is that while the current system is working, steps can be taken to improve it. Canada's uniqueness in size, geography, and resources requires a multi-agency approach, as no single agency has the resources and qualifications to solve the SAR equation by itself. In fact, SAR in Canada is not delivered or executed by a single organization, but is rather a combination and cooperation of multiple federal, provincial, municipal, and volunteer organizations.³ This holistic approach is a 'system of systems.' Despite the best efforts of all involved in the delivery of the service, the SAR system 'puzzle' is missing some important pieces. A careful



The Ocean Ranger semi-submersible drilling platform, 16 February 1982, by Charles Vinh.

analysis needs to be conducted to identify what they are. While the *tactical* delivery of SAR across the elements of the National SAR Program is effective and powerful,⁴ attention needs to focus upon the *strategic* level, as historical coordination deficiencies at this level have undermined the performance of the system as a whole.

SAR's major issues emerged as a by-product of two levels working in parallel instead of working jointly. The tactical level has consistently overshadowed strategic deficiencies, making the system acceptable as a whole. Yet, the government failed to produce a coordinated force, so the system evolved as a relatively-maladjusted collaboration. The central thesis of this article is that the performance of the Canadian SAR system can be improved by fixing the coordination issues at the strategic and operational levels. It seeks to find practical solutions, based upon evidence and analysis, to bridge the strategic, operational, and tactical levels.

Canadian SAR Policy and Strategy

B aseline knowledge of how the system is built is crucial for understanding coordination challenges. The SAR structure is divided into three distinct levels, as follows:

a. Strategic: This level sets out fundamental principles that guide SAR forces in Canada, laying out the intent and expectations of the government, and establishing a framework for the effective use of resources.

- b. Operational: This level applies the principles of strategic intent to actions by describing the use of resources as distinct objectives and responsibilities.
- c. Tactical: This level is concerned with planning and directing resources on the ground and engagements and/ or activities within a sequence of operations to achieve operational objectives. The tactical level is the 'hands' reaching out to the victims.⁵

The broadly-accepted ultimate function of government is to protect the safety and well-being of its citizens. Governments listen to population concerns and develop responses through *policies*, which become *intents* on a specific subject. Policy on Search and Rescue at its infancy can be traced back to the very birth of Canada. The Constitution of 1867 dictates that everyone has the right to life, liberty, and security. The current SAR policy is extracted from the 2004 *Canadian National Security Policy: Protecting Canada and Canadians at home and abroad.*

Policy is enabled by a *strategy*, which is a bridge between the policy and the execution of operations. The SAR strategy as we know it today emerged from a 120-year process, mostly due to a series of incidents that caused the loss of lives. In 1977, due to this increase of obligations and activities, the federal government appointed the Minister of National Defence as the Lead Minister. The Lead Minister for SAR is the single spokesperson for the federal government on overall SAR matters.⁸ Also during the

same year, the Interdepartmental Committee on Search and Rescue (ICSAR) was created. The ICSAR represents the federal group that directly influences, informs, and advises the Lead Minister. In the late-1980s, the government decided to provide a clear strategy on SAR called the National Search and Rescue Program (NSP).

The NSP is a Canada-wide horizontal framework that integrates all organizations and resources involved in the provision of search and rescue services on Canadian territory. The NSP strategy is: "A Canada where

the critical importance of Search and Rescue is reflected in a multi-jurisdictional approach to promote individual, collective and organizational behavior that minimizes the risk of injury or loss of life." The NSP (SAR strategy) is currently embedded in the Department of Public Safety and Emergency Preparedness. The strategic enabler is an organization called the National Search and Rescue Secretariat (NSS), established in 1986 by a Cabinet Decision to provide a strategic platform to its SAR policy. The role of the NSS is coordinating Canada's search and rescue with federal, provincial, and territorial partners, and fostering interoperability and coordination within the SAR community and its 18,000 trained specialists.

The NSS is housed in the Department of Public Safety, but reports directly to the Lead Minister for SAR, the Minister of National Defence. The NSS is comprised of the federal

"The National SAR Program (NSP) is a Canada-wide horizontal framework that integrates all organizations and resources involved in the provision of search and rescue on Canadian territory."

elements of ICSAR, elements of the Provincial/Territorial emergency managements, the Search and Rescue Volunteer Association of Canada (SARVAC), the Civil Air Search and Rescue Association (CASARA), and the Canadian Coast Guard Auxiliary (CCGA).

SAR Operational Level

There are three types of distress: aeronautical, marine and land. While the system is made to act as a whole, basic responsibilities are precise.

The Department of Public Safety dictates that:

- The Canadian Armed Forces are responsible for aeronautical incidents,
- The Canadian Coast Guard is responsible for marine incidents, and
- Provincial and territorial governments are responsible for SAR on land.¹⁰

The overall responsibility for land and inland water SAR rests with the provinces, territories, and municipalities. Typically, this responsibility is delegated to the police force of jurisdiction, which is the RCMP in all provinces and territories except Ontario and Quebec, and in various municipalities.¹¹



Search and Rescue technicians collaborate with local law enforcement as part of a training exercise during Search and Rescue Exercise 2017 (SAREX 2017) on 24 September 2017 in Hamilton, Ontario.

The operational level of SAR consists of every element participating in the National SAR program (NSP). Members of the NSP keep their own jurisdiction, authorities, control, and responsibilities.¹² SAR in Canada is truly a shared workload. Some of the organizations, like SARVAC and CASARA, are dedicated solely to the cause, while others, such as the RCMP, Canadian Coast Guard, and DND, embrace SAR as one duty among others.¹³ The effectiveness of every component is strong and well-established.14 The RCAF has been training and conducting SAR since 1970, and the Canadian Coast Guard has had SAR as a mandate since 1950.15 The members of ICSAR, provincial emergency teams, and volunteer organizations are some of the best-trained in the world.16 Moreover, the leadership and effectiveness of each organization taken separately is very high. The units of the SAR system all have their unique skill sets, and their roles and responsibilities are clear. The main agencies have their own primary focus, but they also have secondary responsibilities that are often as important as their primary responsibilities. For example, the Canadian Armed Forces (CAF) is responsible for aeronautical SAR anywhere within Canada, but it also provides air assets to the Coast Guard for maritime incidents. The military is often called upon as a last-resort resource to assist provincial/ territorial governments for inland SAR. The Canadian Rangers may also routinely be asked to assist in ground SAR operations in the Arctic, as they provide SAR specialists with invaluable knowledge and advice on the terrain, weather, and conditions in a given search area.¹⁷ The operational level can be summarized as a group of agencies with distinct responsibilities that assist each other when required.

SAR Tactical Level

The tactical level is the 'razor-sharp' end of SAR delivery in Lanada. Regardless of the organizations to which they are subordinate, the people of the SAR community are trained professionals that put their lives on the line to save others.¹⁸ Even more unique is the military SAR element, which is one of the military branches in the CAF that 'never sleeps:' it is continuously on operations '24/7.' The SAR system is called upon more than 15,000 times a year to assist people in distress.¹⁹ Tactical coordination can be divided into two main categories of provincial and federal assets. Each province and territory possesses a number of Ground SAR (SARVAC) units across their regions, for a total of 300 GSAR units and 9,000 volunteers.20 The RCMP and provincial police agencies responsible for SAR at the provincial level are also divided in regions and districts to cover SAR. The RCAF has five primary SAR Squadrons with fixed-wing aircraft and helicopter assets spread across Canada. It can also dig into its entire arsenal of aircraft to support SAR, if required to do so.

The federal government divided its responsibility into three distinct Search and Rescue Regions (SRR): Victoria SRR, Trenton SRR, and Halifax SRR (Figure 1). The divisions have been created to provide a balanced coverage with the resources available. Each region is managed 'round-the-clock' by a Joint Rescue Coordination Centre (JRCC) staffed with members of the RCAF and the CCG. A process called SAR timeline (Figure 2) is launched when an emergency situation arises. Alerting agencies, such as 911, contact JRCC for marine and aeronautical incidents *or* they contact the provinces' emergency management organizations for inland incidents.

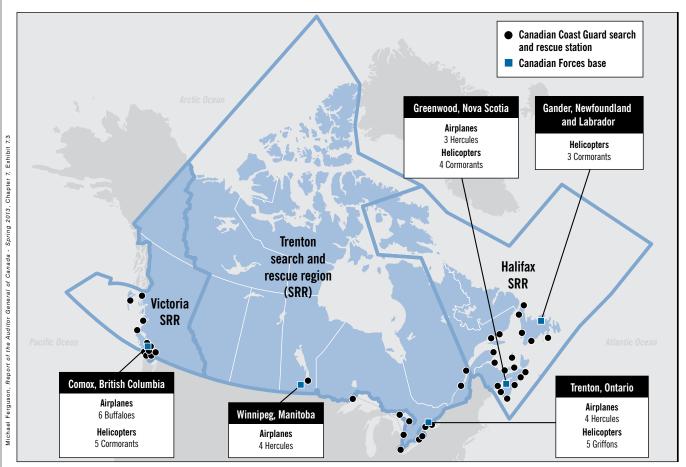


Figure 1 - Locations of Canada's Search and Rescue Stations and Bases.

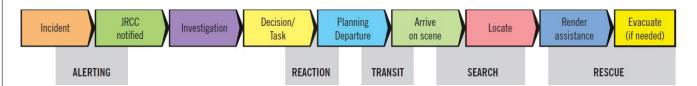


Figure 2 – Search and Rescue (SAR) Timeline.

Michael Ferguson, Report of the Auditor General of Canada - Spring 2013, Chapter 7, Exhibit 7.2

Shortfall #1: The current framework and resources allocated to the National SAR Secretariat (NSS) prohibit an effective connection between the strategic level and the operational elements of the SAR system.

Canada's first challenge in SAR coordination emerges from its geography. With the second-largest land mass and the longest coastline in the world, Canada boasts a terrain that ranges

from the frozen Arctic, to towering mountain ranges, to vast expanses of plains. Added to this geographical diversity is the element of weather, which consists of four distinct seasons with average temperatures ranging from -30 to +30 °C. Together, these features create a coordination challenge that requires a multi-agency approach. Being able to tap into various organizations is vital, and it supports the holistic approach put forward in the NSP's vision.

"The challenge faced by the National SAR Program... is bringing all the independent systems together without having control over them."

The challenge faced by the National SAR Program is bringing all the independent systems together without having control over them. Every partner has its own objectives, doctrine, and funding. It is important to note that the organizations comprising that system also have their own command and control structure. The lack of command and control structure in the current organizational system is highlighted at the strategic level by a non-existent link between the head of the SAR delivery agencies, and the NSS.²¹ For example, British Columbia's Provincial Emergency Program (PEP) is the lead agency for all inland SAR in British Columbia. They deliver their program through GSAR units and the RCMP. While they do have a 'symbolic' position at NSS, nobody is permanently sitting at the NSS roundtable to represent them. The flow of command and control is strong and well-established, leading upward to the head of the PEP. However, it stops there, instead of carrying on to the strategic level of the NSS, with a senior advisor representing PEP. This missing link is mainly due to the lack of human resources allocated to the NSS by the government. The intent of the SAR program is a flow of continuity from the policy to the worker. At the moment, the downward flow effectively stops at the NSS and skips to the operational elements.

This lack of leadership flow makes strategic coordination very problematic, as it is largely left up to the individual organizations to integrate and cooperate with each other. At present, the SAR system is comprised of exceptional groups with well-defined responsibilities, but it does not properly connect at the strategic level to empower the SAR system as a whole. The lack of maturity in our strategic sphere is not caused by inexperience or incompetence but simply by not having the human resources allocated to it. The best representation of the NSS is the analogy

of picturing a maestro with no access to the great musicians of the tactical world.

Shortfall #2: The SAR agencies are often operating parallel to each other with no genuine coordination linking them together.

Unlike most other governmental operations, SAR missions are unpredictable and unique. Even though an average can be predeter-

mined and an alerting posture established, SAR missions cannot accurately be predicted.²² The location and type of distress is only known as it occurs, and so, a reactive response is the only course of action.

As described in the previous section, organizations such as the CAF, RCMP, or CCG are activated to answer the call of duty. Each organization has a specific area of responsibility, and the appropriate elements react to the distress situation. The problem with this

concept is that another element of the SAR system could be better positioned to assist, but is unaware of the distressed. The circulation of information on a specific distress is not maximized. For example, if a hunter is lost in Labrador, the provincial emergency system (RCMP) will be activated, while the CCG and CAF will be unaware unless the RCMP decides to request assistance from one of these organizations. This lack of 'side-by-side' coordination among federal and provincial elements may result in the degradation of SAR services, and ultimately, the loss of lives. The Auditor General report highlighted that "...the SAR departments do not have a common set of principles for coordination with other levels of government on a national scale."23 Operational coordination exists in some locations due to local initiative but is slow, often delayed, and its survival is dependent upon the people in place. Time and communication are the essence in SAR, and ad hoc protocols take time to unfold.

Many examples can highlight this lack of overall coordination reliability. On the night of 23 December 2010, a 23-year-old man stranded on a steep side of Hat Mountain in Cypress Provincial Park, British Columbia, called for assistance. The provincial emergency management and the RCMP responded to the call by activating the North Shore Rescue volunteer organization. After multiple rescue attempts that were unsuccessful due to avalanche risk and darkness, the team lead decided to reach out to JRCC Victoria for military assistance. Shortly thereafter, the hiker was safely evacuated via rescue hoist by members of a SAR helicopter crew from the RCAF's 442 Squadron.²⁴ While this example showcases excellent inter-agency operations, it puts the onus for decision-making and coordination initiation upon a local volunteer team leader.



A Canadian Coast Guard hovercraft off West Vancouver.

Nearly six years later, on 12 December 2016, two skiers were caught in an avalanche while skiing out of bounds near Cypress Hill in British Columbia. The situation bore numerous similarities to that of 2010, but the persistent lack of established side-by-side coordination from federal-provincial organizations produced a different decision-making process. The North Shore Rescue team was not able to access the pair, and decided to leave them overnight without assistance. The team leader stated: "...we really had our fingers crossed for these guys that they were going to survive the night and fortunately, they did." 25

This article is not intended to be judgmental either to the people in distress, or to the team lead on the ground, but the reality is that 442 Squadron had a full helicopter SAR crew '24/7' that could have been there within minutes and evacuated the pair by hoist under night-vision goggles. That this rescue scenario did not take place is not the fault of North Shore Rescue or of 442 Squadron. Rather, the blame lies squarely with the lack of a reliable framework for coordinating the passing of information to the appropriate agency at the right time. A representative from the RCMP (lead agency for Ground SAR in British Columbia) could have been sitting next to his/her military counterpart in the same operations room and could have asked for military assistance when the provincial asset was unable to proceed with the rescue. Instead, the distress call became yet another close call for

disaster coordination, and had the pair succumbed to the elements overnight, our citizens would have required answers as to why the military SAR specialists were not activated.

Not all operational coordination is problematic, as is evidenced by the strong working relationship between the CAF and the CCG. Both agencies have members on watch '24/7,' located in Joint Rescue Coordination Centers across Canada. These members are ready to assist each other when the SAR system is activated. For example, if a boat is sinking off the coast of Newfoundland, the CCG will be alerted as the lead agency. Simultaneously, the RCAF Air Coordinator located in the same room will work with its CCG counterparts to assist with RCAF air assets as required.²⁶ This operational coordination is instantaneous and highly effective.

Shortfall #3: Even though the NSP's vision calls for SAR coordination integrated in a multijurisdictional approach, the operational level is a cooperation that is constantly challenged by federal-provincial relationships.

The main coordination in SAR is between federal and provincial governments. The ineptness of the NSS to bring those multi-jurisdictional organizations together was proven earlier, leaving each of the elements to coordinate among themselves along the lines of a cooperation principle. Cooperation is always easy,



SAR technicians from 413 Squadron, CFB Greenwood, conduct boat insertion exercises from a *Cormorant* helicopter off Sydney, Nova Scotia, with members of the Coast Guard College.

and is seen as successful until problems arise and create pressure on each side. There are numerous examples of cooperation working towards the same goal and common interest, but instituting a permanent structure for a cooperation model is problematic.

Dr. Martin Painter of the University of Sydney is a specialist in government interdepartmental relations, and he writes extensively on Canadian dynamics. He highlights that, in SAR instances where a joint response is expected from the public, the two government levels will play together. Painter also specifies that "...they will co-operate; but so long as the competitive dynamic operates, governments will remain answerable to their own electorates rather than merely to each other in the deals that they strike." SAR cooperation at the operational level instead of SAR coordination is a prime example. Each jurisdiction understands the main objectives of SAR and

is willing to cooperate, but "...the principles underlying the Canadian division of powers are based on jurisdictional distinctions between various subject matters. The result is a system of parallel

rather than interlocking governments."²⁸ The federal government appointed a SAR Lead Minister in 1986. Moreover, the Canadian Emergency Management Act clearly states that the coordination and responsibility for the NSP resides within Public Safety and

Emergency Preparedness Canada.²⁹ This battle of powers is fairly transparent to the general public until their cooperation is put to test.

In 2012, a young boy named Burton Winters left the small Labrador community of Makkovik on a snowmobile, and he was found deceased three days later. The general public blamed the federal government for its lack of effective involvement in the case. In February 2012, then-Minister of National Defence, Peter McKay, called for a DND internal investigation of the case. Shortly thereafter, the Minister declared that the federal answer with respect to the event was qualified as

"satisfactory."³⁰ According to the NSP doctrine, the Minister was correct; the provincial authority had a clear line of responsibility for the case. While the doctrine supports the federal answer, the

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public still 'pointed a collective finger' at the federal government with respect to their role as SAR coordinator in Canada. After reflecting upon this national debate and outburst on SAR, author and reporter Michael Friss Johansen wrote a book about Burton Winters' final journey. His final chapter describes the events as "...jurisdictional confusion and inter-governmental squabbling." The NSP openly promotes to the general public that its core is based upon multi-jurisdictional *coordination*, but the reality is that it is more a *cooperation* model.

Shortfall #4: The lack of coordination produces erroneous expectations of the SAR system from the population.

SAR is a very emotional topic in general, and this is understandable due to the nature of the mission. When lives are at stake, people expect emergency services to deploy all available forces. Unfortunately, Canada does not have the resources to launch its entire SAR arsenal for every case. Canada has approximately 15,000 SAR incidents a year, so it would be inconceivable to have all elements of the National SAR Program (NSP) reacting to so many thousands of missions.

The population of Canada has never gained a clear understanding of the current SAR system's web.³³ Instead, the reality makes room for a more biased vision of what the population should expect in time of crisis. It is safe to assume that, through this unguided process, every citizen lost in the woods or at sea hanging on for their lives expects a yellow helicopter to come to the rescue. Does the RCAF conduct land rescues? The answer is yes, they conduct more than 150 a year. One can ask why the RCAF is conducting land rescues while their primary responsibility is air incidents. The answer is simply because they can do so when other agencies cannot. However, that they do conduct land rescues on certain occasions does not necessarily imply that this capability should be expected in every situation. The RCAF has a secondary SAR role to support the provinces and territories when required. For instance, British Columbia has 1,350 cases of land rescues a year,34 and the RCAF's 442 Squadron covering the West Coast simply does not have the resources to act in all these cases.

The entire SAR system is essentially a victim of its own success. The RCAF might play a heroic role in the rescue of hikers stuck on the side of a cliff, even though it is not their primary responsibility.³⁵ This 'can-do attitude' makes sense to the professionals involved, but the media then takes the stories and pub-



Guardian Angel, by Charles Vinh. A successful rescue by a CH-113 Labrador and its crew.

Painting by Charles Vinh @ http://charlesvinh.daportfolio

lishes them with good intent ('feel-good' stories sell). From this, expectation seeds are planted in the population, so that if somebody gets lost, the expectation is that the CAF should respond just as

they did for someone else previously. The trend poses a problem for the military role in SAR, where the military is perceived as overreaching in what is seen as a "man on a white horse". Unfortunately, the lack of strategic leadership body is not in place to align expectation and educate the population on the reality of SAR resources. The above-delineated approach is simplistic but nevertheless well-anchored in Canadians' minds. The SAR system would readily trade the 'pat on the back' for an educated public on SAR areas of responsibilities.

"A flow of continuity from the SAR Policy to the delivery of SAR is the key to SAR coordination challenges."

SAR matters in Canada. Moreover, in an effort to increase the leadership construct, consideration should be given to transfer the appointment of the Lead Minister for SAR. The Lead Minister

for SAR was appointed in 1976 following an increase in offshore oil exploration and advances in commercial fishing. The Minister of National Defence was a logical choice, due to the involvement of the Department in these activities at the time. Above and beyond being the overall Lead Minister for SAR, The MND has a clear and natural line of duty when it comes to the delivery of aeronautical and marine SAR through the CAF.

Potential Solution #1: Empower the National SAR Secretariat (NSS) to its original purpose of being the central agency of SAR representatives.

Martin Shadwick is a professor of Canadian Defence policy at York University. He commented on the Auditor General Report of 2013 on SAR, saying:

The [report] devotes more space to prevention activities and emergency beacons than governance, even though one could argue that deficiencies in governance have for decades been at the root of Canada's search and rescue problems.... [A]lso intriguing is the degree to which the governance component critiqued the tiny National Search and Rescue Secretariat. Those criticisms are technically correct, but it would have been helpful to fully acknowledge that the NSS has consistently lacked the structure, authority and resources to fulfill its stated mandate.³⁶

The missing link is between the strategic and operational levels. The policy and strategy for SAR is established, and the National SAR Secretariat (NSS) has a clear mandate but no connection to the operational capabilities. No effective coordination can be established if strategic and operational levels do not connect. The void between the NSS and the SAR agencies is the main detractor of the entire SAR system, so the leadership of the SAR delivery agencies need to establish a legitimate connection to the NSS.

The empowerment of the NSS is crucial. For the NSS to be a key player in the delivery and coordination of SAR, every member of the NSP needs physical representation 'around one table.' More people representing the whole spectrum of SAR delivery need to work side-by-side under the NSS to improve the strategic coordination (Figure 3). Furthermore, the NSS needs to employ representatives of every National SAR Program elements, and the head of every organization involved, i.e., the Chief of the Defence Staff from the CAF, needs a connection that sits at the NSS table permanently. A flow of continuity from the SAR Policy to the delivery of SAR is the key to SAR coordination challenges. Resources allocation to the National SAR Secretariat (NSS) would resuscitate its original purpose of being the 'one-stop shop' for

The movement of re-allocating the NSP coordination has already started. In 2003, the NSP found a new home under the auspice of Public Safety Canada. In 2015, the government announced improvements to the SAR system and decided to move the NSS from the DND to Public Safety Canada. The next logical step would be to transfer the SAR lead from the MND to Public Safety Canada. Through the *Emergency Management Act*, the Minister of Public Safety is already empowered to coordinate emergency management activities among government institutions and in cooperation with the provinces and other entities. The move of the Lead Minister for SAR would help in streamlining strategic SAR within Public Safety and avoid the detour to the MND office.

Potential Solution #2: Augment current Joint Rescue Coordination Centers (JRCCs) with the RCMP, relevant lead police agencies and Ground SAR (SARVAC) to make them multijurisdictional centers of operational coordination for all types of SAR incidents in Canada – land, marine, and air.

the importance of an improved representation of all elements of the SAR system in the NSS cannot be underestimated, the main centre of gravity for tangible results remains at the operational level. The idea here is to have a '911-type' organization for all SAR incidents. As previously stated, the participants of the NSP are among the best in the world, and they deliver their respective capabilities in a very effective and professional manner. The issue encountered is the inability to interact in a timely fashion to ensure that the appropriate resources are dispatched at the appropriate time. The great operational coordination between the CAF and the CCG was given as an example of excellent coordination. The CAF and CCG members are co-located in three Joint Rescue Coordination Centres (JRCC) across Canada, and their effectiveness is the envy of other nations.³⁸ The proposed solution is to build on the proven CAF-CCG model and have a physical presence of the Provincial/ Territorial Emergency Element (the RCMP, in most provinces and territories) and a GSAR representative working within the JRCCs. The best place to empower our strong Ground SAR volunteer organization (SARVAC) is to give them a seat in the JRCCs. The JRCCs would then house all operational elements of the NSP, (see Figure 4). In fact, the JRCCs would effectively become the only centers required for operational coordination of all three types of SAR missions (land, marine and air) This solution calls for the current construct to be augmented with appropriate representatives of the current provincials lead agencies as depicted in Figure 4.

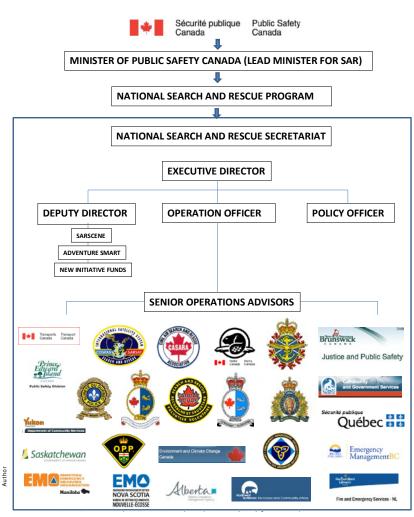


Figure 3 – Proposed Strategic Search and Rescue (SAR) Framework.

This would enable a true operational coordination of the appropriate resources at the appropriate time. ³⁹ Issues with time-sensitive delays due to cumbersome protocols would be eliminated, and cases like the tragic loss of Burton Winters would become unlikely. Practically, all SAR emergencies would be directed to the JRCCs for true operational coordination among NSP players.

The government does not have to look very far for a successful model similar to the one presented in this solution. The Marine Security Operations Centers (MSOCs) emerged from a direction of the 2004 National Security Policy. MSOCs have staff from DND, the RCMP, the Canada Border Services Agency, Transport Canada, the Department of Fisheries and Oceans (DFO) and the Canadian Coast Guard (CCG), making it a unique example of multi-agency integration. Departmental mandates, lines of authority, and communications structures are maintained by each agency within the MSOCs. The expertise of each element working physically side-by-side enables a coordinated interdepartmental approach to fulfilling National Policy.

Conclusion

Throughout the history of the Canadian SAR program, historical deficiencies at the strategic level have undermined the performance of the whole system. The coordination shortfalls have been in sharp contrast to the successes of the tactical delivery of SAR by its various agencies, and therefore, the SAR

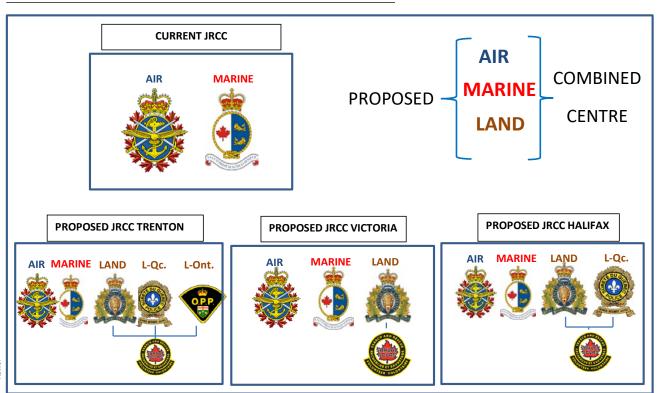
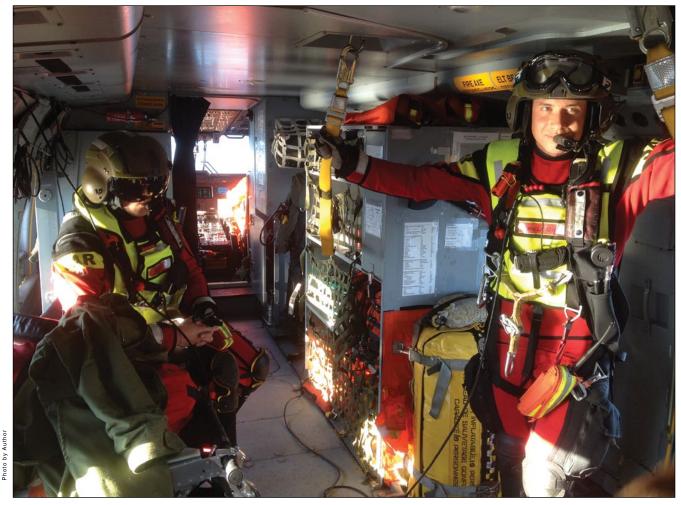


Figure 4 - Joint Rescue Coordination Centres (JRCC) Proposed Construct.



Two sartechs from 103 Squadron discuss rescue strategy aboard a Cormorant.

puzzle has remained acceptable despite missing key pieces. A shared responsibility among civil and military is pivotal to a coordinated SAR execution. Due to a failure of the system to think strategically, the tactical level, also referred as the 'pointy end' of SAR, has slowly become the foundation. This situation has created an inverted pyramid. Even though the balancing act has endured over time, actions are required to correct the situation. The answer that will provide a lasting impact in the coherent SAR delivery is a strategic framework fueled by coordination. The need to synchronize the actions of the joint SAR force with a wide range of government and non-governmental agencies, including elements of civil society, will become an increasingly important part of the *strategic* level. At the *operational* level, the coordination function will be dominated by the need to achieve unity of effort across the

joint force. Two solutions were proposed: first, a representation of every SAR agencies at the NSS table to enable a strategic core and flow from policy to operations, and finally, an increase in JRCCs staffing to include agencies responsible for SAR inland that will bring everyone under the same roof operating effectively and efficiently. The only way to predict the SAR system ten years from now is to put in the effort required to improve it today. Canadians are fortunate to be able to count on one of the best SAR forces in the world. But, like every other governmental mission, attention and resources need to be allocated to sustain this capability that is described at all levels as a 'no fail' mission.





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