Making Waves

Putting Some Navy Back in the Royal Military College

Jim Carruthers

This is an exciting time for the 23 naval cadets who have just graduated from the Royal Military College of Canada (RMC) and have been commissioned as officers in the Royal Canadian Navy (RCN). Yes, I said 23 – that includes all classifications, Logistics (LOG), Naval Technical Officers (NTO) and Naval Warfare Officers (NWO). Yet it is possible that some of these young men and women will never have seen an ocean or spent any time in one of Her Majesty's Canadian Ships in their already more than four years of service. Without a doubt these young officers will not have taken any naval-oriented academic subjects. RMC dropped its last naval-oriented course a number of years ago. Historically Canada educated its naval officers through naval institutions but those days are gone.

While naval colleges in different forms ran sporadically for the RCN's first 40 years,[1] the tri-service Canadian Service College (CSC) successor has endured for over 70 years. Through those 70-plus years CSC has lost naval attributes it once might have had and is now for all intents and purposes a college with an army history and a very small naval component. The non-naval character is not just a case of numbers but permeates the ethos of the institution and processes from basic training through to graduation.

The naval influence and characteristics did not just abruptly disappear but rather atrophied over decades. The CSCs over the decades have changed shape, morphing from three colleges each staffed by a single service, and therefore having navy, army or air force characteristics, to a single college of the army persuasion, and now back to two campuses with language or perhaps civil culture being the differentiator. The erosion of naval culture can be connected to three inflection points – the demise of the Royal Naval College of Canada (RNCC) in the 1920s, the change to make CSCs degree-granting institutions, and integration of the Canadian Armed Forces.

From establishment of the CSCs until the early 1960s the approach of the RCN differed from the other two services. Whereas army and air force cadets entered the CSCs with the objective of graduating after four years – and in many cases went to a civilian university to obtain a degree – RCN cadets often left after two academic years to continue naval-specific training at Royal Navy (RN) establishments. In addition, the approach at each of the colleges

Credit: Adam Dargavel, CFB Kingston

Cadets line up on the parade grounds of the Royal Military College of Canada in Kingston, Ontario, during the annual Commissioning Parade on 18 May 2019.

was different. In the case of Royal Roads, the service college with a focus on the navy, the college had many 'naval college-like' characteristics, including:

- Cadets were recruited by service specific standards and were navy from the first day.
- Royal Roads was staffed by the RCN. The character of the college was navy.
- The terminology was navy, the focus was oceanic, a naval ethos permeated the establishment.
- Time on ships during the academic year, weekend sailing in the sail training ship HMCS *Oriole* and taking auxiliary craft along the coast allowed cadets to develop naval skills and experience real responsibility.

Perhaps the next inflection point took place when RMC was given the ability in the late 1950s to begin granting degrees. Naval cadets no longer had the option to go to the RN to complete their training, and everyone spent the final two years at the army school – RMC. They may have had some naval exposure if they attended Royal Roads, but they graduated from a general military college.

Royal Roads provided a naval environment for the first two years with all the attributes enumerated in the section above. On completion of the academic year, naval cadets remained at Royal Roads, joined by their colleagues from RMC and CMR St. Jean, with the curriculum changing

Credit: LS A.J. Domingo

Cadets and crew set sails aboard HMCS ***Oriole*** *during the ship's Great Lakes deployment, 13 August 2019.*

to shore-based training in navigation and naval subjects before moving to ships for a few weeks of pilotage training in the Gulf Islands, then down the coast to California and over to Hawaii. 'Roads types' were in many ways immersed in a naval culture for the entire first two years. Those from the other two colleges were still recruited by the RCN and spent the summers on ships but they spent their college years immersed in a mainly army environment.

With integration and unification of the Canadian Forces in the late 1960s, the decline of things naval accelerated. It did not happen all at once or in a single location. Royal Roads stopped being a military college in the 1990s, and change spread throughout the system from the time naval cadets were recruited – not by the navy but the Canadian Forces – until they graduated with minimal naval influence. Although things have changed a bit as second year cadets get a long weekend trip to Halifax, the environment is non-navy and perhaps even anti-navy. As mentioned, some naval cadets had never seen the ocean, never mind a ship during their entire time at RMC!

The Future

The tri-service basis of Canada's current defence academies is a strong positive step and of great benefit particularly to those officers who go on to senior positions and work in a multi-service environment. However, it seems clear that it has resulted in a diminishment of naval culture and ethos critical to an effective navy. The CSCs are failing to provide naval officers in the numbers needed and the cultural leanings desired.

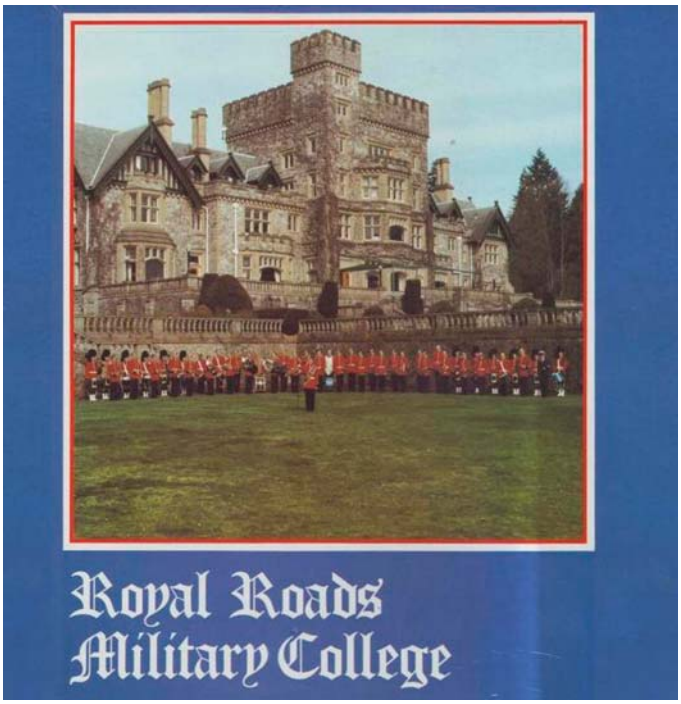
While some postulate a separate naval college as a solution, that is unrealistic. Canada will not see distinct service academies in the future. While we will never turn the CAF/CSC ship around, perhaps we can nudge this vessel so that there is a course alteration that would benefit naval needs. I believe there are actions that can be taken during basic training, while the naval cadets are at RMC/CMR and over the summers.

With naval cadets being immersed 24/7 in a military environment, every opportunity must be taken to provide some naval context. Naval staff at RMC must work harder than their other service contemporaries to provide whenever possible an ongoing persistent naval connection.

In an attempt to make some difference while the naval cadets are at RMC, in 2011 I established, through an RMC Foundation endowment, a series of naval-oriented undertakings. They include: presentation of naval swords to the top NTO and NWO naval cadets of the graduating class; presentation of the 10 volumes of *Salty Dips* – the RCN's 'unofficial history'[2] – to each graduate; support of 40-50 naval cadets at the Naval Association of Canada (NAC) Battle of Atlantic Gala Dinners in Ottawa; support of 40 or so naval cadets at NAC conferences held in Ottawa and two or three naval cadets if the conference involves air travel elsewhere; and attendance at the Halifax Battle of the Atlantic Dinner for second year cadets during their ship visit. The 'tag line' I use to describe this use of my endowment is an attempt to 'Put Some Navy in Naval Cadets.'

Some other changes that should be considered include attention to: initial naval recruiting; naval cadets 'bleeding away' during basic training and their time at RMC; each naval cadet receiving a personal message from the Commander of the Navy welcoming them to the RCN; naval cadets attending naval social and professional events within driving distance of RMC for the entire group and smaller numbers for events requiring air travel; expanding the annual naval mess dinner as much as space permits instead of limiting it to the graduating class; ensuring key, inspirational senior officers attend the RMC naval mess dinner; some sort of naval 'symposium' at RMC with

Credit: Wikimedia Commons contributor "Victoriaedwards"



An old album cover shows cadets in front of the Royal Roads Military College. It has since become the wholly civilian Royal Roads University and no longer trains cadets.

exciting speakers; and a frigate visit to Kingston during the academic year with day sail opportunities.

It seems that summer – which formerly was the time when naval cadets at CSC could begin to be inculcated with naval knowledge – has in part been given over to RMC and the army. It appears that a good number of naval cadets spend their summers at RMC or go to St. Jean rather than undergoing naval training. Even if the naval cadet is working on language training, summers need to be spent on the coast and preferably on a ship. Summers, which are formative with these young people, must be used to begin to put some navy in naval cadets.

It may seem unwise to propose adding courses when RMC is in the process of examining how it can reduce the cost per cadet possibly by eliminating courses, but that is what we need to do. What courses would add professional value and make naval cadets feel they are future naval officers? Some changes to re-establishing a naval academic presence at RMC could include credit courses such as:

- Naval history and naval strategy. Every naval cadet should leave RMC with a basic understanding of these subjects, and officer cadets in other classifications could also benefit.
- Oceanography to provide a basic understanding of the oceans upon and under which the navy operates.
- Ship acquisition, i.e., the process of requirements definition, sketch design, trade offs, roles of other departments, shipyard processes, etc. Every naval cadet would benefit from some grounding in how Canada builds a navy, especially in light of the National Shipbuilding Strategy.
- Overview of naval architecture and marine systems that every naval officer would find valuable in understanding RCN ships.
- Overview tying together electrical, mechanical and computer system disciplines taught at RMC into a systems look at a ship.

Credit: MARPAC Imaging

*The **Orca**-class patrol craft **Wolf** (PCT 59) conducts hoisting exercises with a CH-148 Cyclone helicopter off the British Columbia coast on 25 April 2019. The **Orca**-class is used primarily for training.*

Conclusion

Canada is a three-ocean country. The world's states continue to devote a large portion of their defence budgets to navies. Trade overwhelmingly moves by sea, and the largest source of protein for the world's increasing population is the ocean. Since establishing a navy as a young Dominion, Canada has recognized the wisdom of educating aspiring naval officers in naval strategy and affairs.

Yet as the importance of maritime affairs has grown, naval content in Canada's service academy programs has atrophied. There is little naval content in the current CSC/RMC program. While it is impossible to imagine the creation of a separate naval college in Canada or even major changes to the present military college program, there are small non-disruptive changes that can be made to the

education of naval cadets that would fill some of the gaps. These should include:

- During the academic year putting more navy in naval cadets.
- Summer training, whatever the content, conducted on a coast in a naval environment.
- Course offerings to include, at a minimum, naval content such as naval history and naval strategy.

None of these need be a disruption to the present program; any or all of them would be of immense value to ensuring better graduating officer corps for the Royal Canadian Navy.

Notes

1. For an account of this, see for example, G.N. Tucker, *The Naval Service of Canada: Its Official History, Vol II: Activities On Shore During the Second World War* (Ottawa: King's Printer, 1952), pp. 247-251; and Vice-Admiral (Ret'd) Nigel D. Brodeur, "The Importance of Naval Education for Flag Officer Development," *Canadian Naval Review*, Vol. 14, No. 1 (2018).
2. For more information on *Salty Dips*, see the Naval Association of Canada – Ottawa Branch, available at https://nac-o.wildapricot.org/Salty-Dips.

"Jam Yesterday and Jam Tomorrow, But Never Jam Today"

Vice-Admiral (Ret'd) Sir Jeremy Blackham

Lewis Carroll was making a pun on a Latin grammar rule when he gave these words to the Red Queen in *Alice in Wonderland*, but I want to suggest that they are apposite in today's international diplomatic and strategic wonderland.

Some time ago I published two articles in *Canadian Naval Review*. The first examined the impact on the credibility of the nuclear deterrent of a significant rundown in the underpinning conventional forces and showed that a lack of conventional capability directly undermines the credibility of the nuclear deterrent.[1] The second commented on the growing habit of Western states to measure their military strength by the theoretical ability of platforms without regard to their capacity in terms of manpower, training, spares and ammunition supplies, support and repair facilities, industrial resources and fighting readiness to deploy the full capability.[2] It concluded that we were at serious risk of over-estimating our effective military strength and ability.

I want now to suggest that in much of the Western world, and certainly in the United Kingdom, we are deluding ourselves. We have a political generation that was born in an era of either peace or generally 'easy' wars with few casualties against militarily much less capable opponents. This generation has little or no understanding of defence, and regards conflict as something we undertake to alter things to our advantage with little risk and no chance of serious loss. It has tended to assume that we can start, control and, most importantly, end military intervention entirely on our own terms. The greater risks of world instability, the possible consequences of that, and the need for strategic thought and preparation are lost on politicians who often only find themselves holding government departmental portfolios as a political reward, and not because they have any knowledge or understanding of the subject. The risk of basing operational judgements and decisions on a false appreciation of military strength is too obvious to require elucidation.

The grave dangers and possible consequences of such an approach have frequently and publicly been drawn to the attention of governments by those who are in a position to do so – most notably by retired senior military officers who have retained a keen interest in, and knowledge of, current military matters. Needless to say, their remarks have been dismissed by politicians who accuse them of bias and misunderstanding, and sometimes their remarks have also been dismissed by the current management of the services who may have a difficult path to tread between speaking truth to power and maintaining some degree of morale in their own services.

For the UK, the current crisis with Iran over seized tankers exemplifies all this.[3] To explain, in July 2019 the UK seized an Iranian tanker that was alleged to be breaking European Union sanctions against supplying oil to Syria.

Credit: Ministry of Defence

The Type 23 frigate HMS ***Montrose*** *escorts* ***Stena Important*** *through the Persian Gulf on 25 July 2019.*

Before they did this, did the UK authorities consider and fully prepare for the possible consequences? Iran, which is not a party to these sanctions, threatened to retaliate. The UK sent a single frigate into the Gulf, which obviously couldn't be in more than one place at a time. In due course a Swedish-owned, Indian-crewed but for some reason UK-flagged tanker was seized by the Iranian Republican Guard in the Strait of Hormuz.

Presumably this tanker was operating its Automatic Identification System (AIS) and was therefore trackable by anyone. Was it being tracked? Was the Swedish-owned/UK-flagged ship identified to the Royal Navy (RN) frigate as a vulnerable target? If so, why was the frigate not present at the most vulnerable position? How much detailed planning had been carried out on potential Iranian responses? There are plenty of questions to answer here but that is not my main line of argument.

Credit: Sgt Ross Tilly, Royal Air Force

Jeremy Hunt, then Secretary of State for Health, addresses military personnel on 16 September 2015. Hunt served as Secretary of State for Foreign and Commonwealth Affairs July 2018 to July 2019. He turned down an appointment to lead the Defence Ministry claiming it was a demotion.

More interesting was the reaction of then Foreign Secretary, Jeremy Hunt, who publicly admitted that the RN, and its manpower training and support arrangements, had been run down since 2010 too far to provide for the protection of British shipping in the Gulf and that it urgently needed more ships. Yet he was a member of a Cabinet which decreased dramatically the strength of the RN and dismissed the suggestions that defence was being reduced too far.[4] It will take at least 10 years to restore the strength of the RN and other aspects of defence to its 2010 strength, if indeed it can be done at all with current industrial and training capacity.

It is a fact of military life that operations are conducted and conflicts are fought with the existing force structure, not with those forces we may aspire to have one day in the future. We owe our current capability and assets to the foresight of our predecessors and we have an absolute duty to provide our successors – our children and grandchildren – with suitable force structures for their day. It takes a long time to expand or alter a force structure. It is not simply a matter of ordering new platforms, although that certainly takes an extraordinarily long time, but also of providing the wide range of supporting facilities that military capabilities demand. Any reduction made now, or investment not made, condemns the service to a significant capability gap now and in the immediate future. It provides, in other words, an opportunity for potential adversaries to exploit a weakness.

But of course it is not just more and newer ships that are required. As the Royal Navy is currently discovering, new ships without adequate crews and other enablers are of little use. It is even unclear that the RN will be able to man and equip the ships it has on order, let alone any increase that may be promised. In part this is because the Treasury refuses to allow an increase in a manpower headcount which was set without reference to the actual requirement.[5] Worse still, there seems to be a lack of awareness that the acquisition cost of a ship is only about 25% of the through-life cost. Indeed one can see here the genesis of the manning problem, a consequence perhaps of the impact on retention of a constantly declining and withering overall defence scene, in which British forces are too often

Credit: LA(Phot) Rhys O'Leary

*Sailors line the deck of the Type 45 destroyer HMS **Defender** as they pass HMS **Warrior** in Portsmouth after returning from the Persian Gulf, 12 December 2014. Having adequate crews and support personnel cannot be forgotten as part of a navy's recapitalization.*

sent semi-naked into the fray. As defence review after defence review has shown, it is quick and easy to make immediate savings by running things down. It is much more difficult and costly to recreate what we have thrown away; in some instances it may be impossible.

But there is another important factor. There is an extraordinary level of naivety about defence in the political arena, and a feeling even that senior service officers are somehow more interested in their own narrow advantage than they are in the overall national interest. I am inclined to think that this tells us more about the politicians and their culture than it does about the service culture. There is a feeling too that problems are solved by policy announcements, and not by the physical delivery of the policy on the ground. Policies seem to be assumed to have been implemented and their benefits delivered simply by announcing them. Political career advancement is more sought after than actual improvements on the ground. Words are more important than deeds. As an example you have only to look at the statement that the British naval forces 'lead the world' because we have two aircraft carriers, the 'world beating' T45 anti-aircraft warfare destroyer, the T26 and T31 frigates and the *Astute*-class submarines. In fact the carriers will not achieve their full operational capability until 2023 (and without their full complement of aircraft), the T45 is struggling to maintain its capability, the first T26 (and only three have been ordered so far) will not be operational until possibly the mid-2020s, the T31 has not yet been ordered, and the *Astute*-class will not be complete until the mid-2020s by which time seven submarines will have taken over 20 years to build and the first will already be well into its useful life. Similar examples can be found in the army and air force.

Credit: Andrew Linnett, DE&S Photography

*HMS **Astute**, seen here during its naming ceremony at Barrow in Furness 8 June 2007, will have been in service for nearly half its expected life by the time the last vessel in the class is completed in the mid-2020s.*

The units these ships are one day to replace are in many cases well beyond their planned life and so are difficult to maintain and repair, or have already gone. The potential operational risks of this are apparently unknown to our political masters. In this last respect, the frequent churn in holders of ministerial office does little to alleviate this knowledge gap. The risks of starting an imprudent adventure on a false operational premise are only too obvious.

It may be that the UK illustrates a worst-case scenario, and that Canada has not taken as many steps along the same path. Canada is in a process of building ships in the National Shipbuilding Strategy, does not suffer the same personnel shortages as the UK, and is not distracted by self-inflicted disruption to its major trading patterns. There may still be hope for the Royal Canadian Navy – but beware of promises of jam that never seems to arrive on your toast!

Notes

1. Vice-Admiral (Ret'd) Sir Jeremy Blackham, "Deterrence is Not Only about Nuclear Weapons," *Canadian Naval Review*, Vol. 13, No. 1 (2017), pp. 10-15.
2. Vice-Admiral (Ret'd) Sir Jeremy Blackham, "Capability and Capacity: All that Glitters is Not Gold," *Canadian Naval Review*, Vol. 12, No. 4 (2017), pp. 32-34.
3. This was written in August 2019.
4. It is perhaps of interest that when offered the Defence portfolio by the incoming Prime Minister in July 2019, Jeremy Hunt declined it. Apparently despite having stated that it was something that needed very urgent attention, the portfolio was a 'demotion.' So much for defence being the government's first priority as politicians are fond of saying.
5. This reminds me that when I was at the Royal College of Defence Studies in 1986, a senior Treasury official said in a lecture to us "[y]ou must remember that, in Treasury terms, victory or defeat are irrelevant." Was this the attitude taken by Ministers during the two World Wars I wonder.

Arctic Amphibious Capabilities for Canada?

Colonel (Ret'd) Brian K. Wentzell

As we approach the end of the second decade of the 21st century, it is timely to look to the next decade and the security implications and environmental changes in the Canadian North. With the continued melting of the Arctic Ocean icecap and the quest for mineral, fishing and energy resources in the region, the importance of shipping activities through the Canadian Arctic increases. This has major implications for Canada, its sovereignty and jurisdiction over northern lands, water and airspace.

Changes in the climate have caused significant shrinkage in the polar icecap and ignited interest in the use of the Northwest Passage for shipping through the Arctic Ocean, the exploitation of fish stocks and exploration of mineral deposits and petroleum reserves. As well, there is opportunity for expanded tourist traffic with the use of large and small cruise ships. Surface ship transits of the Northwest Passage from 1903 through 2018 totaled 290 trips, of which 219 voyages occurred since the beginning

Credit: Capt Soomin Kim

Royal Canadian Navy and RCMP members prepare to patrol along the Mackenzie River as part of ***Operation Nunakput 2017*** *on 4 July 2017.*

of the 2000 Arctic shipping season.[1] Voyages by submarines are not included in this number. The greater use of the Northwest Passage and Arctic waters in recent years has included scientific research as governments, industry and other groups explore this little known part of the world.

Notwithstanding the matter of jurisdiction and application of national laws that affect rights of transit and resource exploitation in the water column of the Northwest and Northeast Passages, there are practical security and safety issues for which the adjacent states must prepare. Canada and Russia, with the largest Arctic real estate, must maintain national capacities to deal with marine navigation, safety, pollution control and disaster recovery, as well as access to adjacent lands for addressing such matters. The establishment of regulatory regimes for protection of the environment and health, the use and regulation of airspace, the nature and conduct of scientific research, the exploitation of migratory marine species, among other activities, fall within the jurisdiction of the abutting country.

With the likely increase in ship traffic through the region in the coming years, the question arises as to how Canada will deal with shipping and accidents in the water column or on the surrounding lands. The Northwest Territories and Nunavut are sparsely inhabited and minimally equipped with rescue and medical services. Marine and air navigation systems may be sufficient for existing purposes but not for navigation by significant numbers of large ships carrying cargo or large number of passengers. Canada will be required to improve its navigation systems and provide additional policing, border services, rescue and disaster recovery services. The federal government will have to recover the costs of such services through the levy of fees upon the users of the passage.

Canada must protect its territory, be it land or sea. The presence of foreign ships, crews, cargoes and passengers in the Northwest Passage constitutes a potential threat to the fragile northern environment as well as to Canadian citizens and sovereignty. Thus, Canada must provide capable and credible means to monitor all activities in or upon its territory and have the ability to undertake appropriate actions to counter violations of its laws and territorial integrity.

How will it do this? Violations of Canadian laws will be dealt with by the government of Canada through the Royal Canadian Mounted Police, Canada Border Services or other federal government departments and agencies as appropriate. Violations of Canadian sovereignty will be dealt with by the Department of Foreign Affairs and Department of National Defence.

Credit: PO2 Belinda Groves

A crew member from HMCS ***Moncton*** *transports members of the Royal 22e Régiment back to Rankin Inlet, Nunavut on 27 August 2016 during* ***Operation Nanook****.*

In addition to maritime surveillance capabilities, the Canadian Armed Forces maintain the North Warning System of air defence radars, and space- and surface-based electronic and communications monitoring systems. These systems are the primary means to alert the protectors of sovereignty and providers of assistance to the civil authorities in cases of natural or man-made disasters.

The Canadian Forces are equipped to undertake limited military and aid-to-civil power operations in the Arctic, and all three military services operate in the North. Canada is making an effort to train and equip soldiers, sailors and air personnel to operate in the Arctic. New capabilities are being developed and acquired. However, operations are difficult to mount and sustain due to distance, geography and climate.

The Canadian Rangers are part-time soldiers who reside throughout the Northwest Territories, Nunavut and Labrador. In coastal areas they report the presence of foreign ships and people. However, the regular Canadian Forces may, through technical and visual means, be the first to provide details of a foreign presence. In the event of a foreign incursion into northern Canada or a humanitarian disaster, a full military response would require naval and army formations and units.

Military operations involving army, navy and air elements require favourable conditions. As the area is vast, airborne operations provide the quickest response. However, deploying and sustaining army and air force units require the movement of significant numbers of people, equipment, supplies and the establishment of ground bases. Naval ships require logistic and repair facilities which can be either ship- or land-based. While this provides some flexibility, the presence of ice and inclement weather restricts the ability of even ice-reinforced ships to perform operations in the North during the navigation season from June to October.


Credit: Sgt Sebastien Frechette

Canadian light armoured vehicles cross a river on a German floating bridge in Tancos, Portugal, during JOINTEX 15 as part of Exercise Trident Juncture 15 on 2 November 2015.

Canada has initiated two key programs that will provide a naval capability in Arctic waters. The first is construction of the *Harry DeWolf*-class of Arctic Offshore Patrol Vessels (AOPVs), designed to operate in up to one metre thick ice. The second is construction of the *Protecteur*-class of Joint Support Ships (JSS). While the JSS will not be ice-capable, they are designed so that they can operate in colder waters in summertime. Both classes of ships will be equipped, in varying degrees, to carry armed troops, equipment and multi-purpose helicopters, albeit in relatively small numbers. The troops may include special forces equipped with a small number of wheeled vehicles, over-snow machines and field equipment. Each class of ship will have one landing craft capable of transporting small vehicles and personnel, and one or more rigid-hull inflatable boats. By 2024, the Royal Canadian Navy (RCN) will have four AOPVs and one JSS based at Halifax, Nova Scotia, and two AOPVs and one JSS at Esquimalt, British Columbia. In addition, in May 2019 the Canadian government announced a new construction program for the Canadian Coast Guard that includes two AOPVs and 16 multi-purpose vessels to replace much of its increasingly obsolete fleet, and in July 2019 it announced that more icebreakers would be constructed.

Neither the AOPVs or JSS have extensive weapons or command facilities. The *Halifax*-class frigates, however, have command, air defence, anti-submarine and surface-to-surface weapons. While not ice-capable, they are able to sail in northern waters in summertime. The Cyclone maritime helicopter, which is capable of troop transport and surveillance, can be carried on all three classes of ships. Thus, the Canadian Forces have the ability to command, protect, deliver and support a combined military task force to deal with a security incident or a humanitarian operation in the North, particularly during the summer navigation season.

The Canadian Army has extensive experience in the conduct of humanitarian operations in Canada and overseas. It has also made considerable effort in recent years to develop capabilities for winter operations in Canada and year-round operations in the far North. The greatest challenge is the timely movement of personnel, equipment and supplies to mount and sustain an operation even during the summer period.

While Canada does not have a dedicated amphibious force, the Canadian Army does have soldiers and sub-units that have water-crossing and beach-landing capabilities. The 3rd Battalion of the Royal 22nd Regiment has a company trained for amphibious operations. In addition there are two naval diving units with qualified personnel to do beach reconnaissance and clearance operations. There are army combat engineers who are trained and equipped to do river crossings. The challenge is to bring this talent together to create an organization that could plan, command and execute a successful landing in an unopposed, lightly opposed, or disaster assistance scenario.

The army force must be able to land from the sea using landing craft, small boats and/or helicopters. It must be able to reconnoiter the landing area, deploy personnel and equipment, secure the area, establish a rudimentary base, and commence the operation. The landing force must also deal with its own logistic requirements and communications. While special forces may be involved in some aspects, the main force will come from the regular force and, when available, Arctic-capable reserve units. The challenge is to create a readily deployable unit that has the command, communications, reconnaissance, infantry, engineer and logistic elements.

Although their circumstances are different, the Australian Defence Forces have created a landing force complete with amphibious ships, landing craft and a dedicated army Amphibious Ready Group (ARG). The ARG is comprised of a reorganized infantry battalion, the 2nd Battalion, Royal Australian Regiment. Drawing from the US Marine Corps and Royal Marines, the ARG provides the skills required to reconnoiter and secure a landing zone for a follow-on force built upon a high-readiness infantry battalion group. The ARG is comprised of about 340 officers and other ranks.

While Canada is not located in a volatile neighbourhood like Australia, it could generate similar skill sets for a lightly opposed or humanitarian assistance amphibious operation. Canada could adapt the Australian ARG concept. The core unit could be the 3rd Battalion, Royal 22nd Regiment. Depending upon the need, it could be organized to include a headquarters, a reconnaissance platoon, one light infantry company, an engineer troop, a logistics company and a medical platoon. It could include specialist landing skills similar to the Australian ARG.

There are challenges to be met. The Canadian Army is relatively small but that need not be a problem. The greater challenge is the limitation of naval transport. Assuming three AOPVs are available, each accommodating 50-60 soldiers, with one JSS accommodating 150 soldiers, the entire landing force, including afloat headquarters, would consist of approximately 300-330 personnel. Unlike Australia, Canada does not have the ability to land a large number of vehicles, however, the JSS will be able to handle and land wheeled vehicles and each AOPV will be able to carry a mix of pickup-size trucks and several all-terrain or over-snow vehicles. This would be sufficient for light armed and disaster assistance operations. The landing force would require light weapons to deal with opposition or threats. Each AOPV can carry one Cyclone or Griffon helicopter and the JSS will be able to carry up to four helicopters.

*A rendering of the Arctic Offshore Patrol Vessel in Canadian Coast Guard (CCG) colours. The Trudeau government announced in May 2019 that two **Harry DeWolf**-class ships will be procured for the CCG in addition to six being built for the Royal Canadian Navy. The CCG variants will be used for offshore fisheries patrols.*

Climate change is affecting the Canadian Arctic. The change affects the lives of those who live there as well as those who traverse the lands and waters in the North. Canada must prepare for the impact of increased international interest and activities in its northern lands and waters. Canada can meet the inevitable challenges, but it is time to prepare for the national security tasks that will come with the opening of northern sea routes.

Notes

1. "Transits of the Northwest Passage to end of the 2018 Navigation Season, Atlantic Ocean-Arctic Ocean-Pacific Ocean," Revised 1 December 2018, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge, United Kingdom.