



# Securing Canada's Link to the Arctic

The National Defence and Security Benefits  
of the Mackenzie Valley Highway Project



On behalf of the Sahtu Secretariat Inc, the regional land claim organization in the Central Mackenzie Valley, I am pleased to provide you with this report on the national defence/sovereignty implications of a Mackenzie Valley All-Weather Road.

The report sets out a number of reasons why such a road is in Canada's interests as well as those of the Northwest Territories.

As the report notes, while Canada continues to deal with old Cold War threats, such as Russian, and now Chinese, nuclear ballistic missile submarines operating within our Arctic waters, other threats are growing:

- Russia has been militarizing its Arctic coastline, including setting up a nuclear “wonder” weapon testing ground in an Arctic archipelago;
- Russian aspirations for Arctic shipping on its Northern Sea Route could very well have ramifications for the West; and
- The Arctic Ocean is the only ocean that has not yet fallen victim to overfishing. Chinese fishing fleets pose an immediate risk to this fragile ecosystem.

In addition to these challenges, the Arctic is facing increasing impacts from climate change as coasts erode, rivers lose volume, forests burn and winter roads become less and less dependable.

To help ensure our defence/security needs in the Arctic, support northern economic development and meet the challenges of natural disaster response, Canada needs a dependable All-Weather Road through the Northwest Territories.

Canada needs the Mackenzie Valley Highway.

I thank you for your attention to this work and encourage you to share it widely with your colleagues.

Yours very truly,



Charles McNeely  
Chair, Sahtu Secretariat Inc



## Abbreviations

A2/AD - Anti-Access/Aera Denial  
ABM - Anti-Ballistic Missile  
ADIZ - Air Defense Identification Zone  
AOPS - Arctic Offshore Patrol Ship  
CAF - Canadian Armed Forces  
CAR - Conflict Armament Research  
CCG - Canadian Coast Guard  
CIFFC - Canadian Interagency Forest Fire Centre  
CTBT - Comprehensive Nuclear-Test-Ban Treaty  
DoD - US Department of Defence  
DND - Department of National Defence  
DWF - Distance Water Fishing  
FOL - Forward Operating Location  
HFSWR - High-Frequency Surface Wave Radar  
ICBM - Intercontinental Ballistic Missile  
ISR - Intelligence, Surveillance & Reconnaissance  
MAD - Mutually Assured Destruction  
MVH - Mackenzie Valley Highway  
NORAD - North American Aerospace Defence Command  
NATO - North Atlantic Treaty Organization  
NSR - Northern Sea Route  
NWP - Northwest Passage  
NWS - North Warning System  
NWT - Northwest Territories  
SLBM - Submersible Launched Ballistic Missile  
SSE - Strong, Secure Engaged (Government of Canada Defence Policy Paper 2017)  
SSBN - Nuclear Ballistic Missile Submarine  
START - Strategic Arms Reduction Treaty  
WBIED - Water-born Improvised Explosive Device

## Introduction

There is growing interest in the Arctic region as a transit route for commercial transport and a source of oil and mineral resources. However, standing in the way of both, a territorial complexity is beginning to arise as boundaries that were never fully agreed upon due to the ice cover are now being tested as the ice melts. Arctic nations are beginning to flex their territorial muscles.

Boundary disputes are one thing, but add in rising great power struggles, such as growing Chinese power and Russia's destabilizing presence on the world stage, and Arctic matters just got a lot more complicated.

The first order of government is to provide good governance and security for its people and territory. Successive Canadian governments have shown interest in developing policies that would strengthen Canada's position in the Arctic and provide greater assistance to its remote communities and peoples. However, the truth of the matter is that despite numerous reports, strategies and seminars, little has been accomplished in recent years to fully secure the Arctic and establish clear Canadian sovereignty over the far north.

The question for many, including Canada's Arctic allies, is whether Canada will make the effort to provide effective governance in the region to stave off strategic competitors such as China and Russia.

To do this Canada will need a comprehensive and robust security strategy for the Arctic. It will have to not only address emerging foreign threats but also existing insecurities that face our northern communities, such as food and fuel insecurity. A lack of infrastructure stands in the way of success on either front.

To strengthen our presence in the Arctic region, and to support our Arctic NATO allies, Canada needs to build the infrastructure that will permit the development and maintenance of a larger military presence, increase its electronic and radar surveillance systems, and expand its communications systems. Canada will have to rely on northern communities to help support more personnel and our defence and security endeavours. To do this, Canada will need to expand and evolve its grossly inadequate transportation and logistical network in the north.

At present, there is only one highway that services northern needs— the Dempster Highway, out of the Yukon. The road conditions of that highway are quickly deteriorating, and community leaders in the Northwest Territories are pleading for an alternative route. At the same time, continuing climate change is limiting the traditional barge resupply system on the Mackenzie River with successive seasons seeing reduced traffic and resulting community shortages of all supplies including, most seriously, the aviation fuel needed to provide air services to the isolated Sahtu Region communities.

The Mackenzie Valley Highway will provide the first steps toward a Canadian Arctic Strategy. Moreover, it will connect communities that are at continuous risk of being cut off from the rest of Canada. When Canada looks for an Arctic strategy, the Mackenzie Valley Highway will be integral to servicing our vital security infrastructure.

## Arctic Security Sea Change – An Expanded NATO to meet a rising threat

Climate change and global warming are influencing environments and weather patterns worldwide. It is obvious that the Arctic ecosystem is not immune and as the Arctic warms up, so do the regional ambitions of China and Russia. Both countries have made statements or actions that indicate that there will be a new concentration of policies and efforts in the Arctic.

The Arctic has long been seen by many as a zone of peace, one where disputes can be resolved through territorial dialogue. Scholars at the Finnish Institute for International Affairs disputed this belief in their case study in 2015, which concluded that:

... [the] Arctic is not only connected to global dynamics but also potentially less peaceful and cooperative than typically expected precisely because of them. While this does not imply alarmism in the Arctic – as military confrontation and/or massive re-militarization remain unlikely – it does suggest that the very potential for important and endorsable regional cooperation (or lack of it) must be understood in a broader and more complex context.<sup>1</sup>

Our allies are preparing for this new world. The biggest leap forward is the United States. The US is an Arctic nation with the state of Alaska, but the majority of its population is far away from the Arctic Circle, unlike our other NATO allies such as Finland, Norway, and our NATO strategic partner of Sweden. The US understands that and is taking steps. The US Department of Defence (DoD) released its Arctic Strategy in 2019 and aimed to:

- Build Arctic awareness;
- Enhance Arctic operations; and
- Strengthen the rules-based order in the Arctic.<sup>2</sup>

The DoD planned to do this by strengthening intelligence, surveillance, and reconnaissance capabilities through terrestrial and space-based monitoring and surveillance through NORAD commitments and US Coast Guard patrol capabilities.<sup>3</sup> The US would strengthen a rules-based order through the cooperation of its allies and partners in the region.<sup>4</sup> The US Air Force released its Arctic Strategy in 2020 and said that the Air Force would prepare for Arctic operations and project power through a “combat-credible force”.<sup>5</sup>

The US does conduct Arctic naval operations with regional partners, including Canada, with Exercise Dynamic Mongoose and Operation Nanook-Nunalivut. US Marines conduct Arctic exercises and the US Second and Sixth Fleet have carried out some Arctic operations.<sup>6</sup> The US has pledged that it will increase its participation in regional exercises.

The growing importance of the Arctic and Russia’s continuing militarization of the region will mean that Canada will be expected to increase its Arctic presence. Moreover, the inclusion of Finland, and possibly Sweden, into the NATO alliance means that there will be added pressure from our arctic NATO allies for us to do more in the region.

## Canada in the Arctic

There has been policy interest in the Arctic by previous Canadian governments. The Mulroney government proposed that Canada would acquire nuclear-powered submarines to patrol our Arctic waters. The Harper government began a procurement process for various Arctic vessels for the Canadian Coast Guard (CCG) and the Royal Canadian Navy (RCN).

But Canada's domestic security priorities have not changed appreciably in decades. The Trudeau government released its 2017 Defence Policy Paper: Strong, Secure and Engaged (SSE), which echoed the same core responsibilities as previous governments had.

The SSE pivots around three principles:

- Strong at home, its sovereignty well defended by the Canadian Armed Forces also ready to assist in times of natural disaster, other emergencies and search and rescue;
- Secure in North America, active in a renewed defence partnership in NORAD and with the United States; and
- Engaged in the world, with the Canadian Armed Forces doing its part in Canada's contributions to a more stable, peaceful world, including through peace support operations and peacekeeping.<sup>7</sup>

The SSE had a very brief section concerning the Arctic which noted in closing that an increase in state and commercial interest would result in "...increased safety and security demands related to search and rescue and natural or man-made disasters to which Canada must be ready to respond."<sup>8</sup>

In response, the Department of National Defence increased its funding contribution to expand the Inuvik Airport runway.<sup>9</sup> The Canadian government earmarked \$38.6 billion to modernize NORAD over the next two decades.<sup>10</sup> These new funds cover a myriad of projects including upgrading the CAF's infrastructure at four Forward Operation Locations in Inuvik, Iqaluit, Yellowknife, and Goose Bay. These are needed but modest policy steps when great strides are called for.

As the Standing Senate Committee on National Defence, Security and Veterans Affairs found, military infrastructure is lacking in the north, and much is needed to be done to address this.<sup>11</sup>

The Arctic has changed within the seven years since the publication of the SSE. Russia's military expansion in the Arctic skyrocketed with new bases and capabilities. Russia escalated its hostilities with Ukraine by launching a full-scale invasion. China's rise has raised alarms with US military officials, an outlook that is shared by many, including Canada's Chief of Defence Staff Wayne Eyre with his assertion in the CAF's latest Pan-Domain Force Employment document.<sup>12</sup>

Meanwhile, some things have not changed since the publication of the SSE, such as the much-delayed Polar-class icebreaker and other Canadian Arctic procurement projects.

It is only recently that Seaspan Shipyards has commenced cutting steel for Canada's Polar-class icebreaker – the first of its kind over six decades.<sup>13</sup> This marks only the construction of a "prototype block".

CBC News obtained a heavily redacted copy of a third-party report commissioned by the government concerning the state of the CCG fleet.<sup>14</sup> The average icebreaker, at the time of the report, was 34 years, which is close to the end of service life of 40 years. Maintenance and repairs budget have been slashed since the Chretien era.

Robert Huebert, an Arctic expert from the University of Calgary, rightly commented that the CCG has always been forgotten. It should also be noted that Canada's icebreaking fleet, and lack of replacements, stems from Canadian governments never putting enough consistent emphasis on Arctic policy – essentially frozen policy for a frozen land.

The thawing of the land and the water, and its consequences in the north, has helped to force our attention to the Arctic. It has done the same for our competitors and our allies.

Prime Minister Justin Trudeau toured the North Warning System radar in Cambridge Bay, Nunavut in August 2022 with NATO Secretary General Jens Stoltenberg.<sup>15</sup> It was during this tour, and the subsequent press conference, that Stoltenberg outlined his view that both Russia and China have their sights on the Arctic.<sup>16</sup> Stoltenberg said that NATO's response is to have "...a strong and predictable alliance in the region."

Such an alliance requires that there have to be commitments in the Arctic from all Arctic NATO members.

Canada needs to remember that being part of the NATO alliance means that our defence and security commitments do not end at our side of the Arctic Circle.

Finland's acceptance into the alliance, and possibly that of Sweden, alters NATO's defensive force structure and planning. NATO and its alliance military planners must forge defensive plans if any of its members are attacked. It means that Canada will need a transpolar commitment and strategy.

## Existential Threats

Russia and China have been listed as primary threats under the US National Security Strategy for many years.<sup>17</sup> For almost a decade, Russia's destabilizing actions on the world stage, from Georgia to Syria to Ukraine have caused havoc, destruction and fueled humanitarian crises.

In the cyber realm, Russia has leveraged cyber attacks and disinformation campaigns in an attempt to erode democratic institutions and elections in the 2016 US election and the 2020 UK election.<sup>18</sup>

Russia echoes an imperialist foreign policy as President Putin hangs onto power within Russia and attempts to construct a legacy as the leader that brought power and respect back to the Motherland.

China's rise on the global stage means that it is now a competitor that aims to reshape the international order with political, economic, technological and increasingly military power.

For the latter, China is modernizing its military with new equipment and new capabilities, such as aircraft carriers, fifth-generation fighter jets and improved drone technology.

As climate change alters the Arctic, both of these countries have ambitions that will affect Canada and its allies.

## Russia

Russia has the longest continuous Arctic coastline and has proven itself once again as a competitor and an aggressor in the region and on the world stage. For Russia, there are no allies within the Arctic Circle – only Russia. When Sweden joins NATO, it will mean that seven of eight Arctic nations will be NATO members — the eighth being Russia. If it does not, Sweden will still be an Enhanced Operating Partner that will take part in NATO operations and drills.

Russia is greatly improving its ability to operate in the Arctic with new or revitalized Soviet bases and its command-and-control structure. In 2020, President Putin elevated the Northern Fleet to become the Joint Strategic Command of the Arctic thus creating a fifth military district.<sup>19</sup> Russia's only operational aircraft carrier, the Admiral Kuznetsov, and its only nuclear-powered heavy guided missile cruiser, the Pyotr Velikiy (Peter the Great), are both based in the Northern Fleet.<sup>20</sup>

Russia began to assert itself in the Arctic and its other borders starting in 2007. That was the year it resumed its Arctic bomber patrols and other regional bomber activity.<sup>21</sup> Russian air activity again increased in 2014 with the advent of the Ukraine conflict.<sup>22</sup>

Assets from Russia's strategic airbases are being utilized for Arctic patrols, mostly the TU-95 Bear bombers and the Tu-160.<sup>23</sup> In 2014, there was an incident where American F-22 fighter jets intercepted a group of Russian aircraft, which included two refuelling tankers, two MiG-31 fighter jets and two long-range bombers.<sup>24</sup> This is one of the few intercepts that included Russian fighter jets, which is due to their much shorter range. These flights do not infringe on Canadian sovereign airspace, which is only 20 kilometres (12 miles) beyond the coast but do infringe upon the Air Defense Identification Zone (ADIZ).

This was also the same year that a Russian submarine placed a flag on the ocean floor in a symbolic claim to the polar region's oil and minerals.<sup>25</sup> Russia resumed surface patrols of the Arctic waters in 2008.<sup>26</sup> Since 2005, Russia has been reopening Soviet-era Arctic bases. In March 2021, two Russian MiG-31MB Foxhounds flew over the North Pole for the first time. The MiG-31MB is robust and can operate in conditions of -60 C – a capability that will put its deployment at an advantage over NATO aircraft.

While Russia's losses during the Ukraine war have been immense and in some cases crippling, there will be an end to the war and the Russian government's attitude and view of the West will not have changed for the positive. Russia will rebuild its military and it will not take as long as some think. According to testimony given to the US Senate Armed Services Committee, Defense Intelligence Agency director Lt. Gen. Scott D. Berrier "estimates go from 5 to 10 years based on how sanctions affect them and their ability to put technology back into their force."<sup>27</sup>

Of more immediate concern, Russia is concentrating its nuclear assets in the Kola Peninsula. Russia is also increasing its Anti-Air/Area Denial capabilities with the deployment of fighter aircraft and surface-to-air systems at a myriad of new or refurbished bases along Russia's Arctic coastline. In particular, Russian activity in the archipelago of Novaya Zemlya is raising alarms and Canada needs to take note of this.

### Novaya Zemlya - Russia's Nuclear Weapons Arctic Testing Ground

Russian ambitions in the Arctic stem from Putin's distrust of, and aggression towards, the West. It is the one region in which Russia can have a pivotal and major role with little competition. Russia undertook a grand remilitarization plan for the Arctic with the creation of new bases and the revitalization of old Soviet ones. However, there is one location we particularly need to pay attention to – the bases on the Novaya Zemlya archipelago.

In 2023, Russia's Ministry of Defense released plans to expand and modernize its Rogachevo Air Base on the islands of Novaya Zemlya. It plans to add hangars and extend the airstrip to accommodate long-range interceptors and strategic bombers.<sup>28</sup>



Figure 1: Map Showing the Location of the Novaya Zemlya Archipelago

Rogachevo Air Base received MiG-31BM interceptors, Su-33 fighter jets and squadrons of Su-34 fighter bombers.<sup>29</sup> But, the Air Base is not the only facility that Russia is modernizing at Novaya Zemlya.

It has been recently revealed that Russia is expanding and modernizing its nuclear test site at the Arctic Ocean archipelago.<sup>30</sup> The modernization and expansion of the Air Force base serve to indicate the current and future importance of the testing facility.

Russia conducted nuclear tests at this site from the 1950s until the 1980s, where it saw some of the Soviet Union's most powerful underground nuclear bomb tests.<sup>31</sup> Novaya Zemlya was witness to two of the Soviet Union's nuclear testing accidents – in 1969 and 1987.<sup>32</sup> In 2019, Lt. General Robert Ashley claimed that Russia may be violating the ban on testing low-yield nuclear weapons underground at the Novaya Zemlya site.<sup>33</sup> A fear that has now become more apparent.

In November 2023, Russian President Vladimir Putin signed off on a law that revoked Russia's ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT).<sup>34</sup> Russia has been conducting tests on new nuclear "wonder weapons" at Novaya Zemlya, and with Russia's exit from the CTBT, it is more likely that such tests will increase to demonstrate that Russia is a formidable nuclear power.

The Ukraine War is eroding the resiliency of the Russian Army and society. In a bid to revitalize Russia's position on the world stage and the prestige of its armed forces, Vladimir Putin is turning to nuclear weapons to prove that the country still has teeth.

Among those teeth, the Burvestnik was one of the super weapons that Putin unveiled in his Presidential address to the Federal Assembly in 2018. It dates back before Russia's recent invasion of Ukraine, but not before Russia's annexation of Crimea.

Russia recently tested its new nuclear-powered Burevestnik missile (NATO designation SCC-X-9 Skyfall) and has been dubbed as a flying Chernobyl by some commentators.<sup>35</sup> Given the onboard reactor, this description is hyperbole, but on paper, the missile has close to an unlimited range. This missile is still in development and will take years for its design to be perfected.

The Burevestnik is not the only nuclear-powered nuclear-capable weapon that Russia is testing in the Arctic. The new Russian Belgorod nuclear submarine carries the still-in-development Poseidon nuclear-powered nuclear-capable torpedoes.<sup>36</sup> The torpedo will not be fully operational until at least 2027. It is believed that the torpedoes can dive to a depth of 1,000 ft and possibly reach a top speed of 70 knots.<sup>37</sup> The Poseidon torpedo can reach supercavitation, meaning that it generates a near-skin gas bubble around the torpedo that reduces drag and allows it to reach very high speeds.

Aside from new nuclear ambitions, Russia is militarizing the Arctic with various bases and force restructuring. This does change the security landscape of the Arctic with a more robust Russian presence. But to what end? ‘

General Glen Vanherck, US Air Force Commander of the US Northern Command and NORAD gave testimony to the US Senate Armed Services Committee in March 2023. Vanherck believes that China and Russia “... seek to increase presence and influence in the region while shifting the rules-based international order to their advantage.”<sup>38</sup> Russia’s military ambitions in the Arctic do not only stem from demonstrating a position of strength in hopes of putting pressure on Canada and our allies. Russia’s extraction of hydrocarbons and minerals in its Arctic region helped to fuel its war in Ukraine. Russia knows how to weaponize an essential commodity.

### Russia’s Weaponization of Fossil Fuels

Security concerns over Russia’s supply of natural gas and other fossil fuels increased as Europe’s dependency grew over the years. It was speculated for over a decade that if Russia were to be dissatisfied with Europe enough it would proverbially shut off the taps until the EU capitulated due to higher energy costs.

In response to this supply threat, Europe is looking to move away from fossil fuels, while seeking its still needed supplies from allied countries.

### Northern Sea Route

The Northern Sea Route (NSR) which resembles the fabled Canadian Northwest Passage, will allow commercial traffic to move from Europe to China and North America’s west coast or from China to Europe.

The NSR has been an ambition of the Russian government dating back to the early 1900s. It can be an appealing shipping route. The NSR will reduce “...the maritime distance travelled

between East Asia and Western Europe from 21,000 km via the Suez Canal to 12,800 km through this new route.”<sup>39</sup>

The navigational distance is approximately 40 percent shorter than the Asia-West Suez Canal route.<sup>40</sup> It would provide fuel savings and a time reduction, making it appealing to the global shipping industry. Russia wants the NSR to be the Suez of the Arctic.

Russia will benefit from the NSR as it charges companies for access to Russia’s territorial waters and icebreaking escort fees. Sovcomflot’s Deputy General Director Igor Pankov argues that although the Suez Canal fees are less than Russia’s ice-breaker assistance fees, the overall cost is lower when time and fuel are factored in.<sup>41</sup> Pankov also believes that those fees will reduce as traffic in the NSR increases.

With Russia’s militarization of the Arctic, it could be seen that Russia is taking measures to respond to any accidents in commercial traffic.<sup>42</sup> However, it can be a double-edged sword. Those naval and air units that ensure Russia’s Arctic security and the safety of the NSR can easily be utilized to enforce a naval blockade of the NSR.

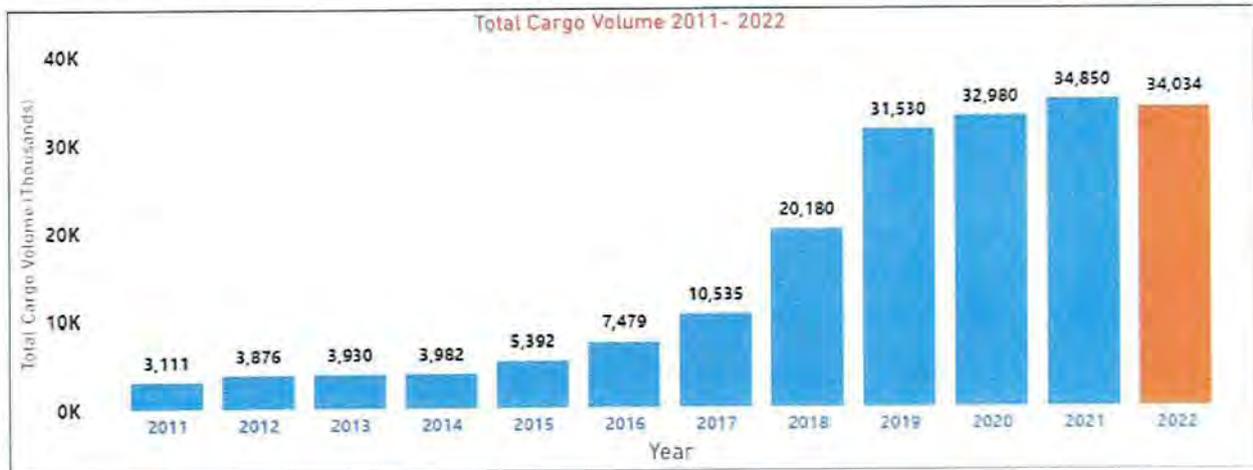


Figure 2: NSR Total Cargo Volume - NSR Information Office<sup>43</sup>

The Russian government approved a strategic plan to develop the infrastructure needed for the NSR. This project was estimated to last until 2035 and cost close to 29 billion USD. In 2022, Russia estimated that 34 million tons of cargo crossed the NSR, which is up from 4 million tons in 2014, and that it will surge to 200 million tons by 2030.<sup>44</sup> This does not seem to be a fantastical aspiration as Russia aims to have more than 80 million tons traverse the same route in 2024.<sup>45</sup>



Figure 3: NSR Traffic in 2022 - NSR Information Office<sup>46</sup>

The long-term goal will be for European supply chains to become dependent on the NSR. Global supply chains will benefit from the shorter route that the NSR offers. Moreover, the NSR can

accommodate larger shipping vessels than the Suez Canal as the open waters of the NSR do not have the same hull width limitations that the Suez Canal has. When the Ever Given ran aground in the Suez Canal and blocked traffic for six days, the impact of each day was estimated to be nearly 10 billion USD to the global economy. Moving to a shorter route that does not face the same width limitations would be ideal.

If the NSR were to become a preferred route then the shipbuilding industry would adapt to produce larger and wider cargo ships. This shift would mean that not only would global markets be attuned to a shorter transportation route, but those vessels would carry far more in tonnage.

Russia could move to destabilize the world order again by shutting the NSR down. COVID-19 demonstrated how weak the global supply chain is and in the aftermath of sanctions because of the Ukraine War, Russia has been isolated and more insular and therefore less affected by the global supply chain — making it a disruptive economic weapon.

Russia could use a multitude of excuses such as weapons systems transiting from South Korea to Poland without Russia's knowledge. Or, it could claim that there is a threat against its Arctic energy sector from a Western aggressor. The claim does not matter. The impact that it would have on the global supply chain with vital components and materials being diverted through a longer transit route would be malicious and harmful to Western economies.

Moreover, the global shipping industry would have moved toward the NSR and there would be a move towards building container vessels that would no longer meet the maximum requirements of the Suez Canal.

This would mean that cargo heading to Europe from Asia, or vice versa, would have to be diverted around the Horn of Africa causing a much lengthier delay. This would be a crippling stroke to the global market and one that the West would have to negotiate with Russia to resolve. It would also demonstrate the global importance, and resilience, of the Russian state — something that we are seeing is critical for the Putin government to continue to project.

In this scenario, there will be calls for Canada to open the Northwest Passage to mitigate the supply chain catastrophe. However, due to a lack of surveillance, monitoring, ports of safe harbour and an adequate emergency response from the CCG or RCN, Canada would effectively be unable to respond.

The Canadian government needs to think about how our strategic competitors will take advantage of our disadvantages — our lack of infrastructure and policy follow-through.

## **People's Republic of China**

China does not have any territorial claim to the Arctic, but it can use its vast resources to erode others' claims to favour Russia or to simply bolster its objectives. Canada, and our Arctic allies, are wary of Chinese investment in the Arctic as it seems that China is attempting to get a foothold in the region. As Lackenbauer, LaJeunesse and Dean illustrate:

“A telling example is Chinese real estate tycoon Huang Nubo's failed 2014 attempt to buy a 218 km<sup>2</sup> parcel of land near Longyearbyen on Svalbard, ostensibly to build a resort for Chinese tourists. Likewise, Chinese state-owned company General Nice Group's attempt to purchase a former naval base in Greenland failed three years later. In

2020, state-owned Shandong Gold Mining announced a deal to buy TMAC Resources and the Hope Bay mining project in Nunavut, Canada. A Canadian review deemed it a national security risk, culminating in a formal rejection in December 2020.<sup>47</sup>

Canada is not immune from this Chinese purchase-for-influence policy. There is a real risk that foreign entities will attempt to gain influence and a territorial foothold in Canada through infrastructure projects in the north. The Canadian Security Intelligence Service (CSIS) warned Inuit leaders of just that.<sup>48</sup> If the Canadian government does not want to invest in Arctic infrastructure then Chinese business, on behalf of the Chinese government, will offer opportunities.

Chinese officials understand China does not have immediate and unrestricted access to the Pacific Ocean as does the United States or immediate access to the Atlantic as many European countries do. The significance of this is that the United States and many of those European countries, such as the United Kingdom and France, were able to expand their global reach and influence across the globe with the ease of maritime transportation.

China's access is restricted by Japan and US allies in the South China Sea and of course with the presence of US military bases in the region. China developed a Two Ocean Strategy under which it has been establishing military bases in the South China Sea and the Indian Ocean.<sup>49</sup> The objective is not to only secure its maritime stature in the region, and globally, but also to secure maritime trading routes in case of any conflict while increasing its sphere of influence.

Military and naval deployments such as the String of Red Pearls in the Indian Ocean or the Ten-Dash Line in the South China Sea demonstrate that China is not an international rules-based actor.

US Deputy Assistant Secretary of Defense for Arctic and Global Resilience stated that:

Chinese leaders are trying to adjust international norms and governance structures in their favour, and they are cognizant of their economic coercion globally and in the Arctic region.<sup>50</sup>

There are trillions of dollars of untapped resources in the Arctic that both Russia and China want to extract to fuel their economy. The access to Russian Arctic resources is one motive for Chinese interest in the NSR. There are other more strategic interests, however.

China's interest in the NSR can be seen as a diversified route if tensions with India were to escalate to the point that Chinese commercial traffic in the Indian Ocean cannot be secured. It is also a policy where China can shore up relations with Russia and expedite its commercial shipping to Europe and the east coast of North America.

China's interest in the Arctic does not only lie with commercial shipping but also commercial fishing. The Arctic and Antarctic Oceans have not been harvested *en masse* owing to a lack of accessibility due to ice coverage. Now the ice is melting and warmer waters are driving fish to migrate north with algae and plankton flourishing at higher latitudes. Pacific salmon and Atlantic cod already have been observed in Arctic waters.

The Yale School of the Environment has outlined how the Chinese fishing fleets are depleting the world's oceans with overfishing to support its own population and export market.<sup>51</sup> It has been estimated that China has anywhere between 200,000 to 800,000 fishing boats. There is a

marked difference between regional and distance-water fishing (DWF), but the number of DWF boats has been estimated to be close to 17,000, which is between five and eight times larger than previous estimates.<sup>52</sup> Chinese DWF is attributed to unsustainable levels of extraction in regions where poor observation, enforcement and governance occur – Latin America and the coasts of Africa.<sup>53</sup>

This could very well occur in Canada's Arctic waters as Canada's oversight is limited. Canada needs to increase its presence and monitoring of its Arctic space or the Turbot War with Spain in the 1990s will be downgraded to a minor skirmish in comparison.

### Icebreaking Nuclear Competition



Figure 5: Xue Long leaving Australian Port, c. 2016

China is constructing its third icebreaker. China's other two icebreakers, *Xue Long* 1 & 2, serve as research vessels and resupply China's seven Arctic and Antarctic stations.<sup>54</sup> The US Navy states that: "China is investing in shipbuilding – polar-capable cargo vessels, liquefied natural gas tankers, and nuclear-powered icebreakers – as well as port infrastructure, to improve access in the

Arctic."<sup>55</sup> This further demonstrates China's goal of being a global naval power and its interests in the polar regions.

These interests may not be limited to commercial transit routes.<sup>56</sup> Burke and Matiesk believe that:

China will likely use its icebreakers in support of shrouded military objectives. Thus, future Chinese icebreaking and so-called commercial traffic might be a guise for positioning military assets in the Arctic, similar to the Chinese use of commercial fishing vessels in the South China Sea to veil military activity.<sup>57</sup>

This was echoed in the testimony of Dr. Robert Huebert to the Canadian Senate when he testified that "Chinese security interests cannot be underestimated."<sup>58</sup> Dr. Huebert also testified that the *Xue Long* engaged in actively mapping the Arctic and Canada's Northwest Passage when it made its first transit through Canadian waters.<sup>59</sup>

According to Huebert, US officials suspect that Chinese icebreakers are mapping routes that will then be utilized by Chinese nuclear-powered submarines.<sup>60</sup>

Nuclear weapons competition is entering a new and dangerous era. During the Cold War, American and Soviet nuclear weapons ambitions were finally curbed with the doctrine of Mutually Assured Destruction (MAD). China maintained a policy of having a minimum deterrent of a few hundred warheads. China's policy has changed and it has not been secretive about its ambitions to enlarge and modernize its nuclear weapons arsenal. The US Department of Defence estimates that by 2035, China could have at least 1,500 nuclear warheads.<sup>61</sup>

Modernizing China's nuclear force with new capabilities such as submersible launched missiles (SLBM), new Intercontinental Ballistic Missiles (ICBMs) and nuclear-capable hypersonic missiles will mean that China will have a first-strike capability.

China has also been increasing its nuclear ballistic missile submarine (SSBN) patrols and has at least one Jin class out at sea at one given time.<sup>62</sup> Each Jin-class can carry 12 JL-2 SLBMs with a maximum range of 7,200km. The noisy Jin-class is expected to be replaced by Type 096 within the next decade.<sup>63</sup> The Type 096 will carry an unspecified number of new JL-2 SBLM with an estimated range somewhere between 9,000 to 12,000km.

This is why we are entering a dangerous period for nuclear proliferation and Canada will be a part of it with Chinese and Russian SSBNs potentially patrolling our waters. At present, Canada does not have the dedicated measures to detect and deter such incursions into our waters. Nor does Canada currently have the measures to deter China's fishing fleet.

## Natural Disaster Relief

The Canadian Armed Forces are being called into natural disaster relief operations more often with every year that passes. The summer of 2023 underscored the vulnerability of the Northwest Territories when it comes to natural disaster relief with its capital, Yellowknife, having to be evacuated for three weeks as firefighting crews battled the blaze that threatened it.

Wildfires in the north are becoming more intense and widespread. The wildfire season of 2023 was particularly devastating. At the time of writing this, the Canadian Interagency Forest Fire Centre (CIFFC) has not published their 2023 figures; but in 2022, "...the 708,916 hectares burned in Northwest Territories represented 42% of the total area burned in Canada..."<sup>64</sup> The vulnerability of Canada's Arctic territories to wildfires and other possible natural disasters is unclouded.

For Inuvik and other communities that are only serviced by the Dempster Highway, it is apparent that their supply chain and possible evacuation route depends on whether the Yukon can spare the resources to ensure that it remains open during a natural disaster.

In July 2023, a wildfire was within one kilometre east of the Dempster Highway. The wildfire was not under control and the crews unable to reach it.

Yukon Firefighters concentrated on protecting cabins at Midlake Way and mitigating the growth of the wildfire toward Fort McPherson.<sup>65</sup> This is perfectly reasonable given that firefighters operate within their jurisdiction and prioritize their response. However, once again, NWT communities affected were cut off from the rest of Canada.

There is also the question of evacuation due to natural disaster relief. In August 2023, the federal government was prepared to order a military airlift of the residents of Yellowknife who were unable to leave via road to Alberta.<sup>66</sup> In the case that the Dempster Highway were to be closed due to wildfire or other disaster, Inuvik and other communities would have to be airlifted. This would pose a predicament for the Canadian government.

The MVH would allow an alternative route that would be maintained by the GNWT through Indigenous contractors.

## Mackenzie Valley Highway

The Mackenzie Valley Highway (MVH) Project aims to connect communities in the Sahtu region in southern NWT with the communities on the Arctic Coast. It will be the first highway that will provide direct links with these communities and for more direct shipping to the Arctic Coast communities from southern Canada.

It is also a project that is under development and has attracted previous federal and territorial government funding. The northernmost section, the Inuvik-Tuktoyaktuk Highway, opened in 2017. In 2018, the governments of Canada and Northwest Territories announced funding for the Great Bear River Bridge and further construction between Wrigley and Mount Gaudet.

There is great importance in having a highway that will provide improved access to the north. It will drastically improve food and fuel security. These essentials can be shipped via Alberta and not be delayed by the worsening Dempster Highway, nor the uncertain water levels of the Mackenzie River. The MVH would truly bring logistical control to the people, and government, of the NWT.

The Mackenzie Valley Highway aims to alleviate logistical restraints, ensure food and fuel security for our northern communities and provide jobs and the ability for those communities to develop on their own terms.

There will also be benefits to Canada with the completion of the MVH — enhanced security in the Arctic. The MVH will provide the necessary support for new economic endeavours, but it will also be a conduit for logistical support and construction materials for security and military matters in the Arctic.

Canada will need to develop new infrastructure in the north in response to the growing foreign presence in the region. Climate change is opening the Arctic to great power competition, and natural resource extraction. China and Russia are taking note and Russia already has undertaken a mammoth project to militarize the north. Our allies are taking notice and attempting to catch up and questions are arising as to what Canada's response will be.

Canada will need to get the Arctic right and developing dependable, year-round infrastructure from the south to the Beaufort coast is the first step.

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