



**ACCUSARS II**

*Advancing Collaboration in  
Canada-U.S. Arctic  
Regional Security II*

*A Strategic Foresight Exercise for the U.S.  
and Western Canadian Arctic Regions*

Workshop Hosted By:



*A Virtual Workshop*

*University of Alaska  
25-26 March 2021*

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## Advancing Collaboration in **Canada-U.S.** Arctic Regional Security II (ACCUSARS II)

### *A Strategic Foresight Exercise for the U.S. and Western Canadian Arctic Regions*

*25-26 March 2021*

*Read Ahead Document.*

*As/of 23 March 2021*

### Introduction.

The North American & Arctic Defense and Security Network (NAADSN), led by Trent University at Peterborough Ontario and the Arctic Domain Awareness Center at the University of Alaska co-hosted the Advancing Collaboration in Canada-U.S. Regional Security (ACCUSARS) I Workshop on 17-18 September 2020. During this workshop participants helped create a practical characterization on the North American Arctic region that in sum, represents an important international crossroads where issues of a warming impacts on the environment, international trade, and global security intersect. Discussions in ACCUSARS I reinforced how state-sponsored and commercial actors from around the world are advancing a number of efforts seeking to share in the long-term benefits of an increasingly accessible Arctic. Some of this activity in the region has the potential to challenge and potentially threaten U.S. and Canadian sovereign interests, including activities outside of the traditional military realm such as increased growing foreign investment, tourism and even leveraging a well-established tool of diplomacy: scientific research.

Continuing this important Canada-U.S. discussion on Arctic regional security, ACCUSARS II seeks to examine the emerging trends in the medium- and long-term aspects in the North American Arctic security environment to create a useful **Strategic Foresight Assessment oriented to the U.S. and Western Canadian Arctic regions** (Alaska, Yukon and Northwest Territories). Via gathering of academics and practitioners at this workshop, organizers will seek to anticipate potential North American Arctic futures using SFA methods to better identify and codify the understood capability gaps and shortfalls in identifying future risks, challenges and opportunities across Canada-U.S. security collaboration to better protect Canada and U.S. sovereign interests in the Arctic.

The following pages articulate important details and emerging trends that serve as the catalyst of seeking to establish a foresight analysis, oriented to 10-15-year distant future (nominally, the years 2031-2036 A.D.).

### A brief discussion of Strategic Foresight Assessments:

Strategic foresight assessments (SFAs) are an alternative to mathematically derived forecasts in trying to anticipate future conditions, but not serve to “predict” the future. SFAs are a useful for



strategists, planners and policy makers in trying to determine plausible futures that can serve to better characterize risks, threats and opportunities to organizational interests. SFAs can be used as a way to anticipate change.

Planners and decision makers rely on forecasts of where anticipated changes in order to mitigate hazard and risk while leveraging emerging opportunities. Most forecast methodologies are mathematically derived and are useful predictors of future outcomes as long as these are fairly consistent to historical trends. Mathematically derived forecasts simply tend to provide a linear projection of the future and unless impacted by a prior disruptive or unanticipated change of significance, are generally quite limited to provide insights to the dynamics of change. The quality of such forecasts is highly dependent on the quality of the data. Fine scale sourced data can equip models to be quite helpful in the veracity and accuracy of forecast models.

Conversely, there is enduring value in strategic foresight activities in which a multidisciplinary community of participants, with varied backgrounds, working together as a team, seek to offer 'foresight' rather than forecasts of future conditions. As the U.S. Office of Personnel Management describes:

“Strategic foresight is not about predictions of the future. In a complex and uncertain world accurate prediction is a fiction. Strategic foresight instead, is about being prepared for different futures that are all possible, plausible and preferred.” Strategic foresight calls for detailed and systematic analysis of driving forces and trends of *change* before the development of strategies or plans. Strategic foresight is aimed at finding solutions and responses that are likely to best suit the (evolving) mission and/or organization. Strategic foresight activities enable better preparedness, because they generate explicit, contestable and flexible sense of the future and in so doing, makes it possible to identify and test assumptions we have about our current environment. Strategic foresight provides insight about the meaning of possible futures which enables organizations to capitalize on opportunities and develop new business strategies that emerge from understanding those opportunities.”<sup>1</sup>

Government and industry leverage aspects of Strategic Foresight Assessments (SFA) to advance planning and support medium- to long-term decision-making. The North Atlantic Treaty Organization has advanced efforts in SFA and future looking entities within the U.S. military, notably, Headquarters' U.S. Coast Guard's Future Concept Division (DCO-X) under the banner “Evergreen” leverage SFA methods and practices.

NAADSN and ADAC leverage SFAs as a practical way to anticipate future conditions of the emerging Arctic security environment, particularly focused on the high latitudes of North America. While ACCUSARS I contributed to the development of a principally Canadian Arctic-focused SFA, ACCUSARS II is intended to contribute to the establishment of a regional SFA oriented to the Arctic regions of Alaska, Yukon and Northwest Territories.

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<sup>1</sup> <https://www.opm.gov/policy-data-oversight/human-capital-management/strategic-foresight/>



NAADSN has created a remarkable source document that serves as a useful foundation in generating subsequent SFAs oriented to regional applications associated with the North American Arctic Security Environment. Quite simply, the “*Understanding the Future Arctic Security Environment, Applying NATO Strategic Foresight Analysis to Canadian Arctic Defense and Security, 2020*” is the source document, in which ACCUSARS II and III will leverage in order to advance sub-regionally aligned documents for essentially the “Western” and “Eastern” portions of the North American Arctic.<sup>2</sup>

While SFAs are useful to apply and adapt to a variety of frameworks, for consistency and to avoid duplication the Canadian Arctic SFA, the regional SFAs planned for the western North American Arctic (Alaska, Yukon and Northwest Territories) and eastern North American Arctic (Nunavut and Greenland) will leverage, build from and orient to categories of the NAADSN Canadian Arctic Defense and Security SFA as described above. As a practical measure for this working level document, all associated references to the NAADSN SFA are inferred as previously cited.

Accordingly, the ACCUSARS II organizers and planners will consider the following categories in developing the *Understanding the Future Security Environment of the Alaskan, Yukon and Northwest Territories, Applying the Strategic Foresight Analysis created for Canadian Arctic Defense and Security, 2021.*

In sum, these include categories will include:

- a. Characterizing the Future
- b. Political
- c. Environment
- d. Economic
- e. Human
- f. Technology (if/as applies to a regional context). Note: For ACCUSARS II, the application of Technology Foresight is not established as a separate/distinct category, but if/as insights and discoveries from the workshop indicate regional distinctions/application, this section will be purposely and distinctly established.

While it is vital to establish understanding of threats, risks and interests that are emerging now in and across the Arctic, and in particular (for the sake of the current focus of ACCUSARS II), for Alaskan, Yukon and NT Arctic regions, it is also important to imagine what are some plausible futures 10-15-years distant that perhaps should drive nearer term priorities in policy, planning and resourcing.

In attempting to develop a Strategic Foresight Assessment applicable to Alaskan, Yukon and NT Arctic regions, understandably will require iterations and incrementally adding additional factors to provide needed granularity, generated by expert insight, collaborative discussions and careful study/research. Achieving a practical SFA also requires an examination of plausible futures.

As a starting point to ACCUSARS II, planners are describing three “plausible future alternatives”

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<sup>2</sup> Please see [https://arcticdomainawarenesscenter.org/EventHub\\_ACCUSARS-II](https://arcticdomainawarenesscenter.org/EventHub_ACCUSARS-II), source document available at <https://www.naadsn.ca/>



oriented to the year 2035. These futures are oriented to three principal factors: Environment, Economy and Security (traditional law enforcement and defense). While the term “security” can serve as a follow-on word to a number of descriptive concerns (such as economic security, environmental security, etc.), for the sake of ACCUSARS II, organizers are artificially constraining the factors that define future alternatives to the above 3 (economy, environment and security).

Influenced by different dynamics of change in regional economy, environment and impacted by a number of geostrategic and governance influences to security, ACCUSARS II organizers have devised three alternative futures:

1. **Today is tomorrow.** A linear projection of today’s current baseline. (Very little has changed in environment, economic and overall security). Factors:
  - a. Geostrategic influences seek stability for international political discourse,
  - b. Russia’s Arctic military buildup stagnates.
  - c. China’s Arctic ambitions slow due to pressures elsewhere
  - d. Arctic environmental changes dampen, confounding Arctic science, Arctic icepack slows the rate of diminishment.
  - e. Economy stagnates due to crushing global debt from massive overspending on COVID19 relief from 2020-2023. Arctic economies remain weak but functioning.
  - f. Subsistence lifestyles continue but are complicated by stagnate natural resources.
  - g. Power generation across Arctic Alaska, Yukon and NT gets more stable with microgrids and alternative resources providing heat and electricity.
  - h. Fish stocks move from Bering into Chukchi Sea.
  - i. Storm surge and flooding continue across Arctic coastal regions but is manageable.
  
2. **Rising China and Rapidly Warming Arctic.** A projection in which China’s rising power and environmental concerns catalyze and prioritizes challenges and concerns. Factors:
  - a. Arctic warming reaches a point in which Greenland ice sheet dramatically melts at rates exponentially higher than 2021.
  - b. Arctic Ocean cold water layer overlying warm Atlantic current degrades to the point where Arctic sea ice largely melts each season.
  - c. Permafrost and erosion escalate, Bering, Chukchi and Beaufort Sea coastal regions are unable to stabilize older construction due to deterioration in soil conditions.
  - d. Economy is constrained by wide-spread carbon caps, greatly diminishing Canada and U.S. market ability to compete in Global markets.
  - e. China, less constrained by carbon caps and favorable trade relations, exploits its advantage to become the number 1 global economy.
  - f. New Natural Gas technologies make LNG a “Green” resource.
  - g. Fish stocks, originally in Bering, now found in Beaufort Sea. Mackenzie River delta feeds nutrients into local waters that combined with warming conditions greatly escalate available fish proteins.
  - h. Storm surges and flooding across North American “Western” Arctic becomes chronic, costly and deadly.
  - i. Increased access to former ice-covered regions results in a rush for resources in minerals in on and offshore regions in the North American Arctic (minus petroleum).



- j. Emboldened by economy, China invests heavily in security forces, now escorts vessels through the Bering Straits and into the Arctic basin for trans-polar commerce.
  - k. Russia's military advancement suffers, and economic partnership with China transitions to one in which China dictates terms to Russia, and Russia complies, because it has no other real alternative.
3. ***Russia reconciles with the west to check rising China with a predictably warming Arctic.*** Canada, U.S. and Europe reclaim a dominate economy, and climate warms at predicted and so far, manageable rates. Factors:
- a. Russia decides that Arctic nations need to band together to counter concerns from "outside the Arctic." Moscow reaches out to Washington and Ottawa for special relationship to counter concerns from Indo-Pacific region, considered unfavorable to Moscow.
  - b. Arctic warming continues, but technology solutions are keeping warming rates manageable (for example, Permafrost degradation remains largely in check.
  - c. Economies in Canada and U.S. regain footing following post COVID 19 double digit inflation, followed by sharp recession and onward recovery.
  - d. Arctic economies discover new sustainable resource, receive outside investments and build-up of local industry along the Beaufort Sea regions.
  - e. Due to economic growth, new investment in roads and airports commence.
  - f. Arctic communities experience lower costs for logistics due to the development of Arctic capable airships, with a rise in quality of lifestyles.
  - g. Rising economy and less severe weather, brings in new residents with seeking to live their goals of "North to the Future."
  - h. Russia vessels, expand their presence across the Arctic basin to "protect Arctic nations from non-Arctic nations."
  - i. Tourism rises and a corresponding investment in ports and attractions, interests to see the Northwest Passage becomes highly sought adventures.

In reviewing these alternatives, what are associated risks, challenges, concerns, threats and interests? What kinds of capabilities and what kinds of policy priorities should be sought? ***These alternatives are intended to be leveraged in ACCUSARS II Breakout Groups on Day 2.***

### **A discussion of current Arctic Security baselines<sup>3</sup>**

Recent reporting from the fall of 2020 and early 2021 highlights that the Arctic continues to warm at 3-4 times the rate of lower latitudes in the Northern Hemisphere. Arctic warming is creating a cascading number of impacts that contribute to reducing Arctic sea ice, melting ice sheets, thawing Arctic permafrost, all of which is affecting the people and animals who reside in the region. The community of Arctic scientists have been sounding concern on the changing Arctic environment for decades and continue to advance knowledge in characterizing the physical changes in the region at an increasingly fine scale. Media reports on activities of government and industry in the Arctic abound, blending boosterism seeking to encourage Arctic development with growing concerns about the activities and intentions of non-like-minded states and non-state actors. The Russian Federation

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<sup>3</sup> Note: Baseline is adapted from Congressional Testimony provided by ADAC Executive Director on 8 December 2020.



continues to invest in enhancing its military footprint and capabilities along its long Arctic shorelines. The People's Republic of China continues to advance its relationships and investment efforts with Arctic nations, to include co-development of Russian Arctic energy production. Reports on "Great Power Competition" between Russia, China, and the U.S. continues to elicit attention across the military communities associated with the North Atlantic Treaty Organization (NATO). Meanwhile, reports on industry continuing its exploration and harvesting of mineral wealth and marine life along the Arctic periphery continue to signal economic opportunities in the Circumpolar North.

The State of Alaska establish the territory necessary to define the U.S. as an Arctic nation. While it may not be evident to many, and likely, most Americans, the Arctic region is vital to U.S. national interests and Alaska's maritime regions of the Bering, Chukchi and Beaufort Seas are the Arctic approaches to U.S. sovereign territory. Alaska's Arctic region is experiencing great change due to rising temperatures, now rising at more than twice the rate as lower latitudes and as forecasts indicate, this trend is posed to continue, and bring unique challenges that will strain all the inhabitants' ability to resiliently adapt...flora, fauna and people alike.

When the United States became an Arctic nation in 1867, the nation became responsible for facilitating domestic security and defending national sovereignty across a significant frontier, known to the generations of Alaska Native residents and a handful of explorers, miners, trappers and settlers from the continental U.S., Canada, Russia or other places. In the more than a century and half since the Alaska purchase, the national security challenges within America's Arctic have fundamentally changed. As seasonal Arctic ocean sea ice levels continues to diminish, the barriers of access are opening the Arctic region to natural resource development, maritime trade, and tourism, all of which is substantially transforming the security landscape of the high latitude north. New international actors now look to the Arctic for opportunity, while existing Arctic nations are now advancing efforts to better realize the region's economic potential.

Canada's Yukon and Northwest Territories comprise the "Western" Arctic of Canada's high latitudes. These two Canadian Provinces share similar geography, long term resident human ancestry and many elements of associated history with Alaska's Eastern Arctic regions. Similar as well to Alaska's Arctic region, the dynamics of environmental change, economic challenges, and the effects of influences from lower latitude.

As the changing Arctic presents new economic and geopolitical threats, risks and opportunities, environmental change poses a significant threat to current economic systems and traditional lifestyles in the Arctic. Thawing (and sometimes melting) permafrost is compromising the land that serves as the foundation for Arctic communities and the small number of connecting roads and ports. With less sea ice cover, weather systems are becoming more volatile, allowing for stronger storm systems that further exacerbate coastal erosion through storm surges, high winds and coastal flooding. Environmental changes in the Bering Sea are now having an impact to traditional commercial and subsistence fisheries as fish stocks are starting to move north, risking and in some instances, already dislocating traditional food sources for marine mammals



and Alaskan Arctic residents alike. Collectively, these environmentally focused changes pose a significant threat to existing coastal communities, local economies and associated infrastructure within the region.

The opportunities of an opening Arctic are an incentive for Arctic and non-Arctic nations alike to pursue easier to access and extract mineral and petrochemical resources, pursue fish proteins (at present, outside of the Central Arctic Ocean), conduct maritime transport, advance tourism and project sovereign influence through national flagged vessels.

Reductions in sea ice have reduced the access barrier to maritime operations and as a result, increasing activity is gaining in the Bering, Chukchi and Beaufort Sea regions. as well of course the overall pan-Arctic, which includes the Northern Sea Route along Russia's northern shore and the Northwest Passage across Northern Canada. The Arctic's diminishing sea ice environment is increasing accessibility to the vast hydrocarbon deposits within the region, which allows for Arctic nation-states like the Russian Federation to expand resource extraction efforts. The diminishing ice Arctic is enabling sea lanes of the Arctic to open sooner and stay open longer through the summer months and increasingly into the fall. May 2020 as an example, saw the earliest recorded Springtime transit of the Northern Sea Route (NSR), and January 2021 witnessed the latest wintertime transit of the NSR, a record that will likely be routinely broken repeatedly in the seasons to come. The emerging economic potential of the Northern Sea Route, and the possibility of a viable Transpolar route within this century have incentivized nations and industry to consider leveraging these new and shorter routes for transporting maritime commerce as an economic advantage. Meanwhile, Canada's Fabled Northwest Passage, looms larger as a source of Canadian tourism in the post COVID19 world. Canada maintains the Northwest Passage as an internal-waterways, not subject to the provisions of Freedom of Navigation as codified in the United Nations Law of the Sea (UNCLOS). The U.S. maintains the Northwest Passage is an international waterway and applies the same logic to Russia's Northern Sea Route. This remains a source of disagreement between the U.S. and Canada, but both nations have continued to "agree to disagree" on the status and continue to find ways to accommodate their respective and opposing views.

The diminishing Arctic ice environment that is enabling rising competition is manifesting itself in a multifaceted manner. It is well understood the Russian Federation has restored and refurbished a number of former Soviet bases along Russia's Arctic region, while creating new facilities and establishing forces at those stations capable of projecting power in and through the Arctic region, well beyond national borders. If this was simply establishing a safe and secure Russian Arctic in creating sound defense by having a more than capable offense, then such activities may be reasonable and possibly even acceptable. However, Russian national decisions and associated defense planning, are opaque at best, and the asymmetric Arctic military advantage created in the Russian Federation should be met with resolve and strength by the U.S. and Canada...as resolve and strength has historically been successful to stabilize relations between Moscow, Washington D.C. and Ottawa.



Russia's approach to managing the Northern Sea Route (NSR) potentially restricts well established measures of maritime Freedom of Navigation outside of established territorial waters. Their practices obliquely, if not directly, potentially restrict freedom of navigation and counter the aspect the NSR is an international waterway.

Russia is a considerable Arctic maritime power. With a dominant number of ice breakers, that range from vessels suitable for riverine operations to nuclear-powered ocean-going vessels, the Russian military can project sovereign influence throughout the pan Arctic in multiple directions simultaneously.

Russian abilities to muster and project military forces into the Arctic are remarkable. The range and complexity of these activities have continued to grow substantially following their restart of Long-Range Aviation back in January 2007.

Russian military exercises in the Bering Sea in late August 2020 are a deeply worrying example where lack of understanding, communication and a willingness for provocation, places not only military forces and response measures at risk, but these actions also place citizens at risk, such as the U.S. fishing fleet that were interrupted and alarmed in their commercial activities by poorly understood and reportedly aggressive Russian military maneuvers.

Since the routine establishment of Extended Economic Zones (EEZ), normally 200 nautical miles from shore, as codified in the United Nations International Convention on the Law of the Sea (UNCLOS) in 1982, foreign vessels are granted the right of innocent passage, permitting transit and freedom of navigation as long as these vessels are not conducting items exclusively prohibited such as weapons testing, polluting, fishing or conducting scientific research. According to UNCLOS, it was allowable for the Russian navy to exercise in the U.S. EEZ, as long as the vessels stayed outside of U.S. territorial waters (12 nautical miles from shore).

As the Russian Federation is an Arctic nation who shares a critical waterways management challenge with the United States, it is in both nations' interests to resolve conflicts, effectively communicate and find solutions to prevent escalation of tension and a rise in military actions along shared and the economically increasingly important waterways in the Chukchi and Bering Seas.

The Peoples Republic of China's efforts in the Arctic is manifesting itself differently than Russian actions. China continues to maximize its influence through use of its economic power to create potential for access to policy governance in forums such as the Arctic Council, and uses its economic strength to potentially position China to gain access to Arctic regional mineral wealth, fish proteins and more. China's economic partnership with Russia for Arctic region liquified natural gas (LNG) is one example of China's advancement on their declared Belt and Road initiative. China continues to project sovereign presence into and across the Arctic via Xue Long I and Xue Long II icebreaker cruises, with a third Xue Long to join future efforts. There are media reports that China is seeking to replicate Russian examples of developing nuclear powered ice breakers. In addition to investments in LNG on Russia's Arctic Yamal Peninsula, China's influence in gaining Iceland commercial port access and efforts to advance commercial mining



interests in Greenland, signal China's strategic aims contain a comprehensive pan-Arctic approach. Based on their actions in other regions, it is a reasonable conclusion to state Chinese national need for raw resources such as mineral and fish proteins will continue to drive their aspirations and activities across the Arctic.

The People's Republic of China see the Arctic as integral to its global ambitions. It is fairly clear that China will continue efforts to gain access to resources and deliver products to market for economic benefit, while also establishing influence among the Arctic community who may be tempted by promises of infrastructure investment and economic development through Chinese investment. Chinese icebreakers continue to project presence in the Arctic region, to include operations in the Arctic basin outside of the U.S. Arctic EEZ in the Chukchi and Beaufort Seas. It is not inconceivable that such a presence could lead to mineral and other extractive measures in the future—closer to the U.S. Arctic maritime EEZ than we would likely prefer, particularly when considering the insufficient measures Chinese industry has made towards environmental stewardship in other regions across the globe.

China's willingness to support infrastructure in developing regions, provides many reasons for caution and close examination of any promise or offer made by the Chinese government or government supported industry. Regrettably, there are a number of instances elsewhere on the planet where such promises have yet to substantially deliver, where more is the case where profound disappointment in these arrangements has been the result. One needs to simply review the many instances in Africa, South and Southeast Asia to get a full picture of the corresponding risks that await in the Arctic. China is not an Arctic nation yet is acting as it has sovereign interests in the Arctic, and had its advocates continue to make remarks that China seeks and should be granted a role in Arctic Governance at a number of multinational forums such as the 2019 U.S. Arctic Research Commission and Woodrow Wilson Center hosted conference on the *Impacts of a Diminishing Ice Arctic on Naval and Maritime Operations*. In sum, China's effective use in leveraging its national economic strength as a means to gain political influence across the Arctic is competing and conflicting with corresponding U.S. National Interests.

To be sure, the Arctic is but one area in the growing array of geo-strategic challenges that place China into competition with U.S. and Canada, but the pace of Chinese advancement in and across the pan Arctic region, to include their increasing presence in Arctic waters is outpacing efforts to deter and dissuade such actions, which potentially (and likely) challenge American and Canadian respective national interest.

A similar intent may be implied about Russia. However, while Russian military strength and considerable reach of their forces across the Arctic, arrayed against Europe and deployed in the Middle East, are dispatched by a nation that has an insufficient economic engine to long-term sustain such force. Russian investments in military capability are to be taken seriously, however, Russian economic shortfalls compromise Russian military strength, particularly when compared to the economic muscle of China as the world's second largest economy. Accordingly, finding ways to manage tensions with the Russian Federation in the Arctic as fellow Arctic



nations, should be sought, particularly from a position of U.S., Canadian and NATO Allied strength. Such measures should seek to first, find a way to decouple joint approaches between Moscow and Beijing. This is possible through diplomatic rapprochement that does not condone or reward past and current malign Russian actions but guided by realizing there are a number of common interests in the Arctic between Moscow, Washington D.C. and Ottawa. This approach may be well aligned to Canada-U.S. interests and serve to better manage escalation of military tensions in the Arctic.

The above discussions are a representative sample of the geostrategic challenges that face U.S. and Canadian national interests in the Arctic. What is important to emphasize, Great Power Competition need not become Great Power Confrontation, and measures to manage and as useful, deescalate are important, if not critical. To be sure, escalation management requires the means and capabilities to back words with commensurate force. Such capability resides in the U.S. and Canadian Security Forces, and it will require vigilance in planning and strategizing to characterize the risk and implement measures to mitigate associated threats.

In addition to Geostrategic challenges, a changing environment, changing economic and safety conditions further complicate the North American “Western” Arctic region.

Overall, the Arctic region continues to experience unprecedented change in terms of environment, weather patterns, and human activity. Over the past year, rapidly warming trends have contributed to decreasing extent of Arctic Ocean sea ice and spurred seasonal increases in storm severity, via significantly stronger winds and coastal storm surges buffeting shores across the North American Arctic. As the Arctic continues to warm, the foundations of coastal regions securely frozen for centuries are now thawing and becoming increasingly vulnerable to intensifying severe weather patterns. In Alaska and Western Canada’s Arctic, this thawing terrain has an unusually high susceptibility to erosion, (particularly in coastal regions), which is of great concern to associated infrastructure and communities. Characterizing these changes at fine scale, remains a research challenge that has yet to be fully addressed.

Enabled by a changing environment, human activity across the Arctic is rising and includes increased commercial marine traffic, bolstered adventure tourism, (albeit temporarily dampened due to the Coronavirus pandemic) and expanded efforts to develop and conduct resource exploration and extraction methodologies. Newly opened pathways from the diminishing ice environment are a draw for nefarious influences in the region and can possibly contribute to unconventional marine safety and security threats including increased illicit trafficking and criminal activity. While modest global crude oil prices continue to dampen off-shore Arctic oil exploration activities in the Chukchi and Beaufort Seas, current favorable U.S. government exploration policies and historically fluctuating crude oil prices are likely to ensure that long-range oil and gas exploration activities will likely increase across the North American Arctic in the coming years.

Transportation networks across the Alaska, Yukon and Northwest Territory (NT) Arctic regions are principally limited to air and seasonal marine conveyance. This problem is felt more acutely in Alaska’s Arctic than Yukon and NT. Economic development remains limited due to



remoteness, lack of infrastructure, high cost, and difficulty establishing new roads, ports, and facilities. In context of new strategies, policies and plans there is a need to consider how safety and law enforcement organizations in Alaska, Yukon and NT will safeguard and secure new economic developments in order to better support strategic goals for regional security.

An increasingly dynamic Arctic continues to affect populations whose ancestors have inhabited the region for generations. Subsistence lifestyles continue but are increasingly threatened by retreating ice and increased regional industrial activity (such as marine shipping and resource extraction), which affect marine mammal activities and populations. Sincere consideration and active participation of local populations' lifestyles, practices, and customs should guide new U.S. federal initiatives and inform DHS and USCG regional activities.

As trends indicate, human activity across the Arctic continues to increase in scope and magnitude. As new Arctic expansion and operations bring a more diverse and less experienced population and the rapidly changing Arctic environment confounds traditional understanding, the percentage of those truly prepared for the Arctic environment is in decline. This leads to risk-prone behaviors that stress resources and challenge the security and defense force's ability to conduct search and rescue, humanitarian assistance missions, protect fisheries and marine & wildlife and lead disaster response operations. Additionally, as more outsiders enter the Arctic, the reasons for their arrival become more diverse resulting in increased need for vigilance in enforcing respective national laws and regulations.

The preceding paragraphs outline a series of concerns and a series of needs to consider in realizing a future Arctic region better matched to Canada and U.S. national interests and the citizens who call the region home. Addressing these challenges are not only limited to the territorial concerns of Alaska, Yukon and NT, but should be conducted in a manner that better allows Canada and the U.S. Arctic regions to serve as the point of departure for increased efforts in the respective National Interest of both Canada and the U.S. across the Arctic basin. To be sure, the investment costs to realize a substantial gain of economic prosperity for the region is sizeable, but so too is the potential opportunity.

The Arctic is an exceptional region. Arctic "exceptionalism" in the size, breadth and depth of ongoing collaboration in facets such as Arctic science, economic endeavors, recognition of indigenous peoples and governance-related activities such as the mechanisms associated with the Arctic Council are the envy of many other regions across the globe. However, continuation of these aspects of Arctic exceptionalism is by no means assured and investment of Arctic initiatives of science, economics, and measures to ensure "CANUS" security and sovereignty, are well within respective U.S. and Canadian interests to advance and to invest.

Responding to the drivers of concern...it is important, if not critical to provide sustained support to the Canada and U.S. law enforcement agencies with improvements and capability to smartly project presence and enforcement to preserve and protect respective national interests within Canada and U.S. respective sovereign spaces, which ranges in providing the clenched fist of



resolve to security missions to the hand of help to respond to civil crisis and to advance science and research in a pan-Arctic context to support the public good.

What this means, is the real and critical value to field the Arctic capable maritime and air platforms and enabling capabilities to secure and defend the maritime and air approaches to the North American Arctic. This also means providing these platforms the ability to serve as fully capable instruments of national sovereignty, capable to deter, dissuade and defend risks and threats to respective national borders and gain smart abilities to receive and conduct command and control and to establish situational awareness and overall domain understanding, across remote and austere regions that have well understood limitations in communications and logistics infrastructure.

As regards to logistics, there should be consideration and deliberation in either developing or enhancing existing infrastructure in the North American Arctic to serve an expeditionary/intermediary function providing logistical and affordable level of repair function in support of security forces operations. Quite frankly, advancing expeditionary support/logistics activities in the Arctic region could prove the most helpful start in creating the programmatic ramp that could result in a multiyear approach to smart civil/military solutions to enable security forces the ability to better protect transportation, tourism and other industry activities.

A principal activity for CANUS Security Forces in the Arctic region is to provide the hand of help in search and rescue and disaster response. Both Canada and the U.S. security forces conduct well known and highly regarded search and rescue, and also provide pollution and other environmental response. Spill response is costly, and proactive prevention is difficult and logistically straining. Scientific research and oil spill response communities provide important support to the efforts, but to be sure, advancing science of spill response and improving inspections using science and autonomous systems to better monitor across storage facilities across vast and remote regions will grow more important as facilities age and are more compromised by thawing permafrost and other environmental changes underway across the Arctic.

Advancing the capability of CANUS Security forces in the Arctic also means advancing trusted relationships. For example, the Arctic Coast Guard Forum provides an opportunity to advance needed cooperation among all 8 Arctic Coast Guards. The Arctic Security Forces Roundtable provides a chance for 7 of 8 Arctic nations and several non-Arctic European Nations to contribute to Arctic oriented Defense Support to civil authorities. The U.S. Coast Guard maintains an important relationship with Russian counterparts (for Bering & Chukchi Sea waterways management), and the U.S, Canada and the Kingdom of Denmark security and defense forces work closely in regional cooperation. Sustaining trusted relationships are a domestic matter as well. In the Alaskan Arctic, there exists good cooperation across Federal Departments and Agencies, State of Alaska, Alaska Native Communities and Academic partners. The same is true in Yukon and NT, in which Federal, Provincial and Arctic Indigenous communities operate with respect and understanding. It remains critical to consult and



understand the challenges faced by the Canada and U.S. citizens of the Arctic who see first-hand, the changing Arctic and can provide uniquely important insights beneficial to safety and security responders. The adage that you can't surge trust or a trusted relationship...applies in full measure to the Arctic.

While the Arctic region is increasingly impacted by the changing physical terrain and a rise in a variety of human activities, the Arctic also provides some of the best examples of international political, industry and academic cooperation on the planet. Highlights include the Arctic Council, led by 8 nations and 6 internationally recognized Arctic Indigenous groups, and supported by outstanding scientific research and focused working groups; the International Maritime Organization (and the IMO's supporting Polar Code); the International Arctic Science Committee; and the University of the Arctic.

The United States is fortunate to have Canada as our closest Arctic defense and security partner and ally. This includes a shared defense commitment through the North Atlantic Treaty Organization, shared protection via protecting respective aerospace domains and the maritime approaches to Canadian and American sovereign territory via the North American Aerospace Defense Command (NORAD) and a complementary defense arrangement through United States Northern Command and Canada's Joint Operations Command. This bi-national defense cooperation is supported by the Canada-U.S. Permanent Joint Board of Defense (PJBD), established in 1940 by joint declaration between the U.S. President and the Canadian Prime Minister. PJBD today has 4 CANUS departments represented: DoD, DHS and Canada's Department of National Defense and Department of Public Safety. As useful as the forum is towards advancing bi-national defense and security cooperation, it remains perhaps, a bit underleveraged in both Washington and Ottawa.

## Conclusion...looking to the future.

National strategies for Canada and the U.S. Federal agencies drive policy and resource decisions that affect the security of each respective nation. The State of Alaska and the Provinces of Yukon and Northwest Territories drive regional governance, with local and tribal governance providing granular understanding of the developing threats, risks and opportunities of the region. Looking to the future, it is important to understand, from the current baselines of security and defense, what are the policy, planning and resourcing decisions needed near term, to effect better outcomes from the range of possible conditions that could emerge and dominate CANUS policy makers, national regionally, and locally...in the years to come?

As strategies continue to evolve in the current U.S. and Canadian national leadership, knowledge-products, which capture insights and perspectives, and bi-national collaboration, provide a unique opportunity to inform planners and policy makers alike as they revise and develop new Federal strategies and policies in Ottawa and Washington D.C. for respective national actions in the Arctic. Such collaboration should extend to regional and local decision makers as well, in order to strengthen the fabric of CANUS cooperation in and across the North American Arctic.

