CANADA'S ARCTIC SOVEREIGNTY UNDER SIEGE: THE PRINCE PATRICK INCIDENT OF 2040—AN ALTERNATIVE SECURITY FUTURE

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Development of effective defence capabilities requires an assessment of potential security threats within the context of a number of alternative futures. In the examination of potential future scenarios it can be valuable to assess the interconnectedness of global trends across a broad range of disciplines. These may include security, economics, demographics, technology, and natural resources, as examined from a national interest perspective in a regional and global context.

This article is written as a historical account from the perspective of a strategic analyst living in 2040. The analyst identifies those developments that have occurred in the past decades that describe the changes relevant to a particular security challenge in Canada's North. Though aspects of the changes are identified, and indeed the challenge itself may appear less than probable in the context of 2009, the reader is asked to suspend disbelief based upon today's historical reality in order to begin to consider "what if" in the context of 2040.



The World in 2040: Significant Geopolitical Shifts

Over the first four decades of this century, Brazil, Russia, India and China (the BRICs) have, as predicted, seen explosive and sustained growth. Economically, politically, and

militarily, they have achieved levels of international significance (read power) that were once reserved only for the U.S. and for a short time the former U.S.S.R. Shifting military alliances in regions like Africa, South and Central America have been alternately beneficial to and problematic for Canadian involvement in the flash wars and small wars of Sudan, Colombia, Zimbabwe, Congo, and Antarctica. In spite of Canada's contribution of very few troops (or none) to these actions, the Canadian record and willingness to collaborate continues to allow Canada a seat at the table whenever discussions proceed for interim and final status of a given conflict.

Although seemingly far from "significant" in the context of Canada's North, the nations of China, the European Union (EU) and even South Korea (in addition to the circumpolar nations) became involved in Canada's North.

Peak Oil

For several decades since the mid 1960s some forecasted that a crisis condition known as "peak oil" would arrive (a time at which global demand for oil would exceed supply permanently), followed by a decline in world productivity and an accompanying spike in world oil prices. While these predictions were wrong throughout the 20th century, and remained premature in the early decades of the 21st century, the forecasts created expectations in the years immediately prior to 2040. Evidence of a genuine peak oil situation remained in doubt, although prices became volatile.

Alternative Energy

Despite the huge increases in terms of funding greater research and development (R&D) for alternative energy solutions, no revolutionary results are anticipated before at least 2060.

One R&D initiative that has borne fruit is nanotechnology. Various discoveries in the field identified emissions-scrubbing catalysts that allowed the burning of coal in a way that is vastly cleaner than ever before. Other R&D led to improved solar and wind harvesting efficiencies. These, in turn, led to smaller energy transportation requirements owing to the localization of energy production.

Climate Change

Climate change impacts, although never linked conclusively to man's impact on the environment, have become more and more extreme over the years. A number of droughts and water shortages and weather pattern shifts are probably related to the global trend. Permafrost thaws have also become more and more problematic. Pipelines, roads, airfields, and entire town sites experienced costly-to-remedy impacts as the ground moved and heaved in much the same ways that southern Canadians had long known. Solutions in all cases were capital-intensive; and slow solutions have led to federal vs. territorial vs. municipal funding tensions.

Global and Regional Military Shifts

North Atlantic Treaty Organization. NATO in 2040 remains relevant, if underemployed. Although there was never any public agreement on the subject, most of NATO's members independently concluded that the costs of Afghanistan were far too high (and too unpredictable) for the stomachs of western democracies. Tensions with Russia rose and fell in step with various crises over the decades, while Russia's shooting wars were limited to only a few of those ex-republics that it sought to regain. While NATO has remained largely unchanged (and unengaged, in a post Afghanistan, commitment averse, global security order) other newer multilateral security organizations have sprung into existence.

Circumpolar Arctic Treaty Organization. Over the years, the tensions which have been consistent between NATO and Russia have morphed into tensions amongst Russia

and some other non-polar nations. This is a curious development given that in the early days (circa 2015) Russia had been invited to become a founding member of the Circumpolar Arctic Treaty Organization (CATO). When Russia bowed out (some thought that that had been intended to scuttle the talks that led to the creation of CATO), there was some surprise that Canada, the U.S., Denmark and Norway had proceeded to create CATO. The goals of CATO included international collaboration on most things Arctic, with strong themes of a minimization of the militarization tendencies of some polar and non-polar nations in the North, environmental protection, and the coordination of national search and rescue (SAR) resources.

North American Maritime and Aerospace Defense Command. Back in 2006 when the ninth North American Aerospace Defense Command (NORAD) renewal agreement was signed a new set of responsibilities was incorporated alongside the decades-old air/aerospace defence set. When additional responsibilities (the



monitoring and warning for threats from the maritime approaches to North America) were added to the NORAD agreement, the deliveries of new maritime capabilities were many years in development. After a decade when substantial capabilities began to emerge, the organization's name was modified from NORAD to North American Maritime and Aerospace Defense Command (NORMAD). While one of the principle goals of the maritime capability injection has been to counter threats to Canadian and U.S. security approaching the northern maritime continental boundary, a mix of challenges from climate to technology to flagging political resolve has delayed progress in this area. The lack of recognition by the Canadian and American public of new threats in the northern domain remains disconcerting even to this day in 2040. This illogical posture (and Canada's resistance to appropriate defence and Coast Guard funding for the North) is probably the biggest reason that Canada has since invested so heavily in other programs to address security issues for the North. That said, gaps remain, particularly illicit trafficking into and through the North. Where there was once a trickle of illicit traffic in the 2020s (including weapons to U.S. militias, and drugs and human traffic to Canada and the U.S.), the security improvements around the rest of the continental perimeter have deflected organized crime routes northwards. The "soft underbelly of an otherwise secure North American perimeter" is the way that some pundits have repeatedly described the North in recent years.

North American Defense Organization. Canada joined the North American Defense Organization (NADO) after much lobbying by the U.S. and Mexico. The initial intent of agreement was to provide cost and resource savings to all parties for their respective border security agencies. This was touted as not unlike the EU approach to security for travelers— without the EU style of political engagement. Over a period of time, however, the activities of NADO, in conjunction with the constraints of the North American Free Trade Agreement (NAFTA), and the cumulative impacts of various American policies and persistent action by political staffs and leaders of the day, cajoled Canada and Mexico into adopting (or closer to adopting than they might have otherwise done) an American isolationist approach to trade and global engagement. Given the trends towards an era of global persistent conflict much in evidence circa 2010 (both in doctrine and in fact), this shift towards an American isolationist posture was a surprise to futurists and to policy analysts alike. Also surprising was the extent

to which the American apparatus was successful at convincing successive Canadian and Mexican administrations, given, in both cases, their high reliance upon foreign trade.

Canadian Defence Force Developments

In the wake of Canadian mission adjustments in Afghanistan in 2011, and the decade-long economic slump following the 2008-2010 recession, the rebuilding of the Canadian Defence Force (CDF) was slow. The new name CDF is the product of one government that had been unable to accomplish much (other than defence resource reductions) during its term. This neglect of Canadian security requirements has had a direct and generally detrimental impact on Canada's security posture in the North. The long overdue icebreaker for the Coast Guard and the frequently announced ice capability for the Navy have both been delivered—but only after years of delay. In regards to Army mobility in the North, the methods of movement have not changed much in decades (or centuries if you excluded changes to air and maritime assistance). The focus is mainly on surveillance and access, which is, for the most part, provided through satellite, air and naval platforms.

Canada's Deployments

The major muscle movements resulting from Canadian military and foreign policy since Korea were those in Eastern and Western Europe, Afghanistan, Africa and South America. Later, after decades of very limited expeditionary activity, Canada decided to lead a small stabilization effort in two new and emerging African nations in 2036, Zefrapa and Zefranda.¹ That mission, created in response to high seas piracy threats, grew and expanded into a substantial coalition effort that seemed to have little prospect of success in the near or mid terms. Canadian (and indeed coalition) stabilization efforts escalated rapidly into frequent and sometimes costly combat operations, which drew massive criticism at home and abroad. As the mission expanded within Zefrapa, Canadian troop contributions (especially soldiers and aviation) escalated. After five years in theatre, Canada has begun to rely more and more heavily upon private military corporations. Recent government policy seemed to be seeking a risk-averse way ahead; one that is much less troop intensive. In the absence of another nation stepping up to take lead nation responsibility for the mission, the future of Zefrapa and Zefranda remains unclear.



The rising significance of secure access to the sea lanes for global transportation was predictable. Acts of piracy spiked early in the century. Given the costs and difficulty of

patrolling the world's oceans, many nations have adopted a two-thrust strategy to address piracy. The naval blockade of failed states (which harboured pirate bases) is one thrust, and one that is much less expensive than patrolling the sea lanes themselves. The other thrust (which surprisingly to some has turned out to be the more effective long-term strategy to deal with piracy on the high seas) entails a number of Army deployments into chaotic failed and failing states. In this way, foreign teams with comprehensive participation (involving military, other government departments [OGDs], and non-governmental organizations [NGOs]) have sought to rebuild the institutions and machinery of a governed state. Clearly, some states have been more receptive to these measures than others. Still, a seriously high price is paid (in terms of Canadian blood and treasury) to plant some fledgling aspects of democracy, the rule of law, and some marginally functional democratic institutions. Paradoxically, Canada's greatest successes in these types of missions have occurred when she deployed capable inter-agency teams from multiple governmental departments. Meanwhile, she has suffered the greatest losses when the military contingent was only *just* ready for the expected mission.

Perhaps the most surprising allies for the past few decades are those from India and Brazil. Their arrival to the field of expeditionary (and mostly altruistic) operations in the 2020s appears to be a sign of the times. It seems that both nations have begun to manage their explosive growth (not to mention regional military tensions) faster than many had anticipated.

Circumpolar Developments

Meanwhile, in the northern circumpolar region things have progressed apace. International collaborative scientific expeditions worked well to a point. Exploration of the Lomonosov Ridge became politicized even before a general level of recognition for the stakes had arisen. Regardless, the five circumpolar nations succeeded in meeting their deadlines for submissions concerning extensions of polar continental shelf claims. From that time forward (when the rules-based process was expected to determine the extent of competing continental shelf claims), the wheels have all but fallen off. Institutional inertia prevented even the first feeble rulings from the United Nations (UN) for almost a full decade. Generally unsatisfactory to all concerned parties (and unsatisfactory to China and South Korea too), the rulings have been under appeal almost continuously for 20 years now. This has not been productive for the level of goodwill in the region. Political and even military tensions have been rising incrementally for two decades with uncertainties over shipping and the exploitation of natural resources, especially oil and gas. Even such relatively minor issues as environmental protection regulations (and their enforcement) and SAR responsibilities have become international irritants. But in the past decade, a coalition (Canada, the U.S., Denmark, and Norway) has worked tirelessly with Russia to arrive at interim multilateral agreements that (while not completely ignoring the progress at the UN) temporarily remove the urgency for a UN decision. The benefit for the energy-starved markets in the rest of the world is that the potential oil and gas-rich fields in the North are finally going to receive the investment that many feel they deserve.

Hans Island and the Lincoln Sea sovereignty questions were the easiest of all geographical conflicts to resolve, and insignificant in the larger picture. However, the Canadian debate on the Beaufort Sea boundary dispute experienced controversial levels similar to those of the Free Trade Agreement machinations of the 1980s. In the end, the Prime Minister became involved and Canada traded away the sovereignty of about 60% of the disputed Beaufort Sea region. In exchange, Canada received U.S. support of the Canadian position regarding the "Canadian internal waters" status of the Northwest Passage (NWP) and indeed all routes through Canada's Arctic Archipelago. However, to the immense disappointment of Canadians ever since, the UN rulings on the NWP have been under constant challenge, first by Russia, then by China, and now it is entirely likely that at least two of the other superpowers will also submit challenges. Meanwhile, the American portion (60%) of the disputed Beaufort Sea claim is tremendously productive. Oil and gas exploitation on the American side has experienced more than quadruple the production rates of the Canadian interests.

As the summer ice presence in the NWP has changed, more and more adventurers have made the transit every year. Some years these efforts ended in tragedy as some of the adventurers were criminally ill-prepared for adverse conditions. Commercial traffic, meanwhile, has remained uncommitted in the NWP as the North Sea Route has long been more ice free and a more reliable trans-polar traffic option. Until the annual flushing effect of icebergs and ice packs in the NWP changes, it appears that commercial traffic will remain a low probability.

NORDREG. The northern maritime traffic reporting system was strengthened in 2012. The voluntary reporting system, one which for several years received well in excess of 98% compliance (since adherents received free meteorological products and SAR coverage), was modified to require compulsory reporting 96 hours in advance of a vessel's entrance into Canadian waterways. The only problematic nations, in light of the new requirements, are China, Russia, and occasionally South Korea. Diplomatic channels have been churning for decades (mostly without much effect) to improve compliance in the North.

When the Arctic Waters Pollution Prevention Act (AWPPA) was expanded in 2014 from 100 to 200 nautical miles, it was generally well-received. The change has not been challenged, but perhaps as importantly, Russia and China do not recognize it.



Coast Guard and Navy

By 2030, the Canadian Coast Guard (CCG) brought into service a heavy icebreaker a long overdue replacement for the 1960s vintage Louis St. Laurent. Recognized as a world class ice-capable vessel it is able to operate year round in first year ice, and for three seasons each year, in the more robust multi-year ice (up to 2.5 meters thick) as well. The vessel proves its value time and time again when used to assist vessels in distress throughout the North. The vessel CCGS John G. Diefenbaker and her crew have also been employed extensively in support of various scientific initiatives.

Meanwhile, the Canadian Navy also entered the North with a new fleet of six Arctic Offshore Patrol Ships. In the early days, there was controversy about the role of the Navy in the North, some having concluded that it would have been more practical to leave such

operations up to the Coast Guard. Recommendations for a collaborative relationship between the CCG and the Navy in providing sovereignty and security presence in the Arctic found a great deal of support. In the end, the senior service has adopted the new mission sets with enthusiasm and to great effect.

Communications Challenges in the Arctic

Despite the world wide revolution in communications (a Moore's law effect that had not shown any signs of abating), the relatively low density of development in the North was and remains accompanied by communications challenges. Many regions of the Canadian Arctic have little or no Banana coverage. The Banana, a Canadian invention, is the "great-grandson" of another Canadian invention, the Blackberry. Voice activated, global positioning system (GPS), video and holography enabled, secure Bananas have become so thoroughly integrated into daily life in the South, that visitors to the North have experienced real trouble when their Bananas have become just another piece of jewellery. Even the quaint throwbacks (the ubiquitous satellitephone and low-tech satellite-mail) continue to have spotty coverage mostly limited to urban and industrial centers in the North. Satellite capabilities (which had seen huge improvements in the past decade) are still the promises that have not quite delivered—at least not to everyone in every community, and in particular, not to many of the isolated northern communities.

Forward Operating Locations

As Canada's four Forward Operating Locations (FOLs), each capable of supporting fighter operations, reached the end of their anticipated economic life expectancy, and after mid-life refit plans were cancelled (twice), it became necessary to dedicate more and more effort to operate and maintain the facilities. This resulted in the establishment of small military garrisons at Inuvik, Yellowknife, Rankin Inlet, and Iqaluit.² In recent years, the government pointed to these garrisons as evidence of an increased security footprint, while in reality the small detachments have much more to do with infrastructure maintenance (and contract management) than anything else. A side benefit of the increased military presence in the North is a marginally enhanced capability to deal with a range of minor emergencies, as well as limited support for ground search efforts.



Combat Camera IS2009-2020

Arctic Training Centre

The federal Arctic Training Centre (ATC) initiative announced by the Prime Minister in 2007 was delivered over a period of more than a decade. Establishment of the ATC capability had leveraged the pre-existing footprint of the Natural Resources Canada's Polar Continental Shelf Program at Resolute Bay. A success story in multi-departmental collaboration, it is utilized by Canada Command as well as all three Environments primarily for individual training requirements. The ATC's accommodations, messing, vehicle fleets, communications suites and sustainment facilities are frequently maximized (sometimes beyond their 100-bed capacity), which has led to plans, as yet unfunded, for expansion. Plans to augment the fly-in staff at the ATC with a permanent cadre (trainers were rotated in annually from the CDF Land Advance Warfare Centre at Trenton and from the CDF School of Search and Rescue at Comox) are also contingent on future approvals. While the permanent Department of National Defence (DND) establishment in Nunavut is an effective base for multiple training purposes, the absence of permanent military staff has not seemed to limit that capability in any insurmountable ways. At the same time, a number of individual and collective training initiatives have been making use of other existing DND facilities, including the FOLs and the North Warning System sites.

Northern Ranger Expansion

The first phase of expansion increased the strength of the Northern Rangers (NR) to 4,800 persons by 2015.³ The second phase of expansion (not foreseen at that time) was planned for implementation circa 2025-2030. The expansion was initially deferred partly due to economic pressures (the Government needed more flexibility to deal with other economic pressures of the day) and partly due to a lack of political will to further develop the North. Fortunately, the program was later resurrected for implementation in 2039-2044. Expansion of the NR capability is welcome throughout the North, particularly in the several cities and communities which saw almost 100% growth in just over the decade since 2010. In some communities, that record growth (almost entirely due to corporate moves related directly or indirectly to resource industries; about one-half by Canadians, and half by temporary visa workers) doubled again beginning in the 2020s.



Combat Camera IS2009-202

Although the establishment of a Ranger Training Centre had been planned to occur in each of the territorial capitals for a number of years, funds remain to be allocated. As a result, the training requirement remains largely dependent upon mobile training teams.

New Reserve Subunits

Following the successful establishment of a reserve infantry company in Yellowknife circa 2015, the establishment of two more reserve companies is planned. Both are expected to have a service support role with a focus on northern operations, likely targeting SAR missions and/or other emergency tasks. Though their locations, likely in Nunavut and the Yukon, have not yet been finalized, it is probable that the territorial capitals of Iqaluit and Whitehorse will be selected.

Arctic Reserve Company Groups

The idea of establishing Arctic Reserve Company Groups (ARCGs) was born almost 40 years ago. Initially, it was achieved by refocusing the training of one Reserve company in each of the Land Force Areas (southern Canada) to include progressively more comprehensive Arctic training and deployments. In recent years, a new plan was placed under development. That plan is to see an expansion of the Army's Northern capability to include Arctic training and deployments for an additional company per Reserve *and* Regular brigade. In the distant future, there will be an additional plan to concentrate training of one Reserve battalion per Area and one battalion per Regular brigade for the North too. The largest single obstacle to readiness to date is a simple real world challenge. Funding for training with a northern focus is not the problem. Striking the right balance between expeditionary and domestic (primarily Arctic) training is the perennial challenge.

Nanisivik Deep Water Port

Initially established in 2015 as a limited service Refuelling Facility for federal vessels (i.e. the Navy and Coast Guard), this facility has demonstrated world class standards of safety and environmental stewardship. With a great deal of federal support, Nanisivik expanded in the following years to include an upgraded airhead and additional fuel storage and distribution capabilities. Over a multiple decade period, the plans called for limited multinational commercial refuelling capabilities—both for air and maritime requirements. Caching of Land and Air sustainment supplies for national (and/or international) emergencies were also part of the plans. However, the occurrence of a fire in 2035 (one which could have been catastrophic) led to a modification of plans. A plan to decentralize emergency sustainment caches is now under development.

Economic Developments Leading up to a Northern Crisis in 2040

More than 30 years ago, when a U.S. Geological Survey report identified phenomenal levels of *potential reserves of oil and gas* in the northern circumpolar regions, it was widely dismissed.⁴ With the impact of global warming, escalating global demand for oil and gas, and the resultant development of technology for northern extraction operations, all this changed. Internationally, the rates of production of oil and gas from across the Arctic approached historic peak production levels equal to the Persian Gulf region,⁵ a region which for a decade saw declining productivity. The Canadian North, owing to its relatively inaccessible geography was the last region of the North to see development. Since 2025, however, demographic and economic growth has been explosive throughout the Arctic Archipelago due to the increase in production. Economic spinoffs include a broad range of tourism from adventure holidays, eco-tourism, cruise ships, to a new level of interest in hunting, fishing and even photography camps.

In recent years, numerous groups identified and criticized gaps in Canada's Northern security capabilities. Some analysts noted that the growth in mining towns and the explosive growth in wealth of Canada's North raised a security challenge far more in need of military

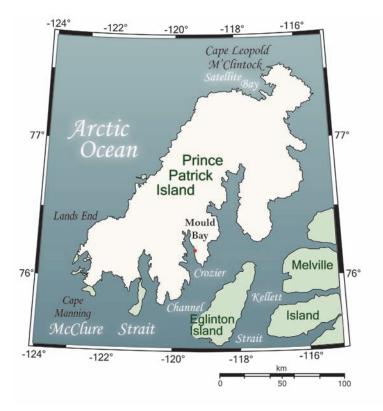
capabilities than the increased (but still minimal) presence of Royal Canadian Mounted Police (RCMP) detachments.

Offshore Developments

During the decade 2020-2030, political and economic conditions in East Asia began to shift. Asian republics, in general, emerged in an increasingly politically unstable region where international rogue elements flourished. In particular, the Republic of Xenostate became a hub for criminal organizations, which initially converged in this region attracted by its vast reserves of natural resources, including diamonds, gold, silver, oil, gas and coal. Legitimate Xeno corporations, which had occasionally dabbled in black market activities— such as firearms, narcotics, and the sex trade—began to venture further and further into the criminal world. Ultimately, this progression led to the emergence of increasingly powerful eastern syndicates. For instance, by 2030 a Xeno firm known as ZHAPROV had achieved a degree of size and power akin to that of other East Asian giants. As the syndicate gained more influence in both legitimate and black markets worldwide, it became ever more synonymous with the corrupt Xeno government. Nevertheless, ZHAPROV itself maintained a legitimate image on the global market.

ZHAPROV Expands into the Canadian Archipelago

In 2036, following a number of successful offshore oil operations, ZHAPROV bid for and won exploration rights for the first time in Canada. Successful wells were proven within a year, and by 2038 operations on the northern shore of Prince Patrick Island, NWT, were launched. The ZHAPROV lease covered a relatively small region on the shore of this desolate island in the western region of the Canadian Arctic Archipelago.⁶ The ZHAPROV operation included a



small logistics settlement near the mining facility, which included an austere harbour, a small airstrip, equipment warehouses, accommodations and oil storage facilities. The facility was staffed primarily by ethnic Xenos.

As the oil potential for the entire island appeared to be lucrative, ZHAPROV had applied early for exploration rights for the remainder of the island. When the Canadian response to the ZHAPROV request was routine (i.e. rights for some of the other parts of the island were to be auctioned in different years in the 2041-2045 time frame), ZHAPROV protested. When it became evident that neither protests nor inducements (a.k.a. bribery) would accelerate the ZHAPROV request, the firm decided to pursue other options.

Sequence of Events

2039: Throughout the shipping months, a number of sources⁷ reported that the level of logistics activity at the ZHAPROV mine on Prince Patrick Island had accelerated abruptly.

Early September 2040: Two ships—one icebreaker and one ice-strengthened ship—departed from a North Asian port. Ninety-six hours prior to entering Canadian waters, they reported their presence in accordance with NORDREG, listing a routine cargo of mining equipment and supplies bound for the ZHAPROV mining settlement on Prince Patrick Island. Upon entering Canadian waters, the vessels' communications mysteriously went silent.

Saturday 15 September 2040: Analysis of satellite imagery indicated that upon arrival at Prince Patrick Island, the ships harboured on the southern shore in Mould Bay, a site not requested in the NORDREG submission and not authorized by the environmental regulations of Canada.

Monday 17 September 2040: Following the discovery of this development, the CCG attempted to clarify the intent of the deviation from plans by contacting the vessels by radio. Despite redoubled efforts, all attempts to communicate failed.

Wednesday 19 September 2040: The CCG notified relevant OGDs including Border Services, Indian and Northern Affairs Canada (INAC), DND, the Department of Foreign Affairs and International Trade (DFAIT), and the Solicitor General. Both the Government Operations Centre and the Integrated Threat Assessment Centre began to monitor the situation.

Friday 21 September 2040: Independent surveillance reports utilizing RADARSAT IV, and from NORMAD and other American resources, confirmed that the offloading of supplies was progressing at a rapid pace. Analysis indicated that preparations for drilling operations proceeded at a site not authorized for ZHAPROV, or any other firm.

Saturday 22 September 2040: Further analysis of other surveillance data indicated the presence of one or two foreign submarines in vicinity of Prince Patrick Island. They appeared to be patrolling on a continuing basis with a wide radius around the island.

Sunday 23 September 2040: Before a request was made by Canada, the U.S. confirmed the placement of United States Navy (USN) submarines (numbers unconfirmed) in the vicinity of Prince Patrick Island in the interest of monitoring ZHAPROV's activities near the Beaufort Sea. They expressed concern for possible aggressive Xeno action in the interest of capitalizing on the disputed territory with much oil and gas potential. The Americans also noted that the mysterious ZHAPROV's ability to conduct short and long range communications with other, non Canadian stations.

Monday 24 September 2040: Coincidentally, a Canadian Ranger Patrol, conducting one of their routine annual training events, launched a multi-day patrol to Prince Patrick Island from nearby Eglinton Island bound for Mould Bay.

Tuesday 25 September 2040: Further analysis of remote surveillance data estimated that the staff presence on Prince Patrick Island clearly surged from the roughly 100 staff previously present at the ZHAPROV facility in the North to almost 1,000; most of which were

located at the new facility in the South. It also appeared that some sort of commercial and/or military activity had been present in the south, long before the arrival of the vessels.

Wednesday 26 September 2040: Further analysis indicated that the ZHAPROV airstrip on Prince Patrick Island was in heavy use by helicopters ferrying cargo from the vessels to Mould Bay. Whenever the airstrip was not in use, it was routinely closed by local staff who parked heavy trucks at key points along the airfield. The airstrip at the northern facility was being closed in exactly the same way.

17:00 hours—Thursday 27 September 2040: More than 10 km offshore at a point south of Mould Bay, the Ranger Patrol was met by a patrol on snow machines that appeared to be from the ZHAPROV landing. Communication was impossible due to language barriers, but the message from the ZHAPROV patrol was clear: "Go away—now!" There was no obvious threat of violence, but many automatic weapons were very clearly present. Uniforms were not visible. In their report back to headquarters, filed just a few hours later, the patrol also described hearing unusual sounds, very distant and very loud, similar to, but not quite like thunder.

15:30 hours—Friday 28 September 2040: The Attorney General asked the Chief of the Defence Staff (CDS) to be prepared to provide Aid to the Civil Power in the event that the RCMP is unable to deal with the situation. An hour later, the Chief of Staff to the Prime Minister contacted the Ministers of DFAIT, DND, Border Services, Fisheries and Oceans, Public Safety and the Attorney General. He explained to them that the Prime Minister wants a briefing at her residence tomorrow (Saturday) at 11:00 hours to identify options "to deal with an unauthorized foreign presence in Canada's North." Later that night, the Office of the Prime Minister (PMO) advised an ad hoc selection of cabinet ministers to be prepared to receive briefings on matters of urgent national security, perhaps as early as Sunday.

Epilogue

Before the reader voices disbelief for this portrayal of a security threat, it may be useful to recall a number of relatively recent Arctic incidents. For instance, in 1969 an American supertanker named the *Manhattan* sailed through the NWP without requesting authority from Canada.⁸ In 1985, the U.S. Coast Guard vessel the *Polar Sea* sailed through the passage, again without requesting Canadian permission.⁹ In 1998, a Russian Ilyushin-76 aircraft landed at Churchill under irregular circumstances.¹⁰ In 2008, Russia resumed the Cold War practice of probing the Canadian air defences with trans-polar flights; reinstituted with a surprisingly high level of frequency.¹¹ In 2009, President Bush released a revised U.S. Arctic Policy, which reflected the American position that the NWP represents an international strait and called for an increased U.S. presence in the North to reinforce its economic and security interests there.¹²

Canada's current posture regarding the security of its Northern frontier could be described as "surveillance-centric and troop-minimalist," or "high-tech, low-muscle." With the expected growth in resource extraction operations in the North, along with a commensurate explosion of populations, communities and wealth, the announcement by the Prime Minister of a new national focus on the security and sovereignty of the North¹³ in 2007 did not come as a surprise.

The challenge for DND in the coming years will be to balance this requirement with existing defence commitments. In the case of the Land Force, the challenge is made especially critical by the realities of our northern geography and climate, and by the continuing requirement to train and deploy troops in expeditionary capacities.

Endnotes

 Artificial nations representing potential areas of conflict for the purpose of this discussion.
Canadian Department of National Defence, "Radar Coverage and Air Defence," *Canadian Air Force*, http://www.airforce.forces.gc.ca/site/athomedocs/athome_1_3_e.asp (accessed 18 March 2007).

3. Government of Canada, "Backgrounder — Expanding Canadian Forces Operations in the Arctic," *Office of the Prime Minister of Canada*, 10 August 2007, http://pm.gc.ca/eng/media.asp?id=1785. Prime Minister Stephen Harper announced the expansion of the Canadian Rangers from 4,100 to 5,000 over a 20 year period.

4. It was believed that the estimates were theoretical and wildly high because of the difficulties of discovery, extraction and transportation in the North were expected to make operations commercially unviable for many decades, if not centuries.

5. Benoit Beauchamp and Rob Huebert, "Canadian Sovereignty Linked to Energy Development in the North," *InfoNorth* — Arctic, Vol. 61., No. 3 (September 2008), http://pubs.aina.ucalgary.ca/arctic/ Arctic61-3-341.pdf (accessed 27 August 2008); and, U.S. Government Energy Information Administration, "World Proved Reserves of Oil and Natural Gas," 3 March 2009, http://www.eia.doe.gov/ emeu/international/reserves.html (accessed 27 August 2008). Reports on oil and gas estimates for each nation, summarizing each continent's potential.

6. University of Guelph, "Map of Prince Patrick Island," http://www.arctic.uoguelph.ca/cpe/ environments/maps/detailed/islands/prince_patrick.htm; and, U.S. Geological Survey, "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," Fact Sheet July 2008, http://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf and in *Geology.com*, http://geology. com/usgs/arctic-oil-and-gas-report.shtml.

7. Northern Ranger patrol reports, RADARSAT IV imagery, NORAD, and independent U.S. imagery. 8. John Kirton and Don Munton, "The Manhattan Voyages and their Aftermath," in *Politics of the Northwest Passage*, ed. Franklyn Griffiths (Kingston: McGill-Queen's University Press, 1987), 70-73; and, Michael Byers, "The Need to Defence Our New Northwest Passage," The Tyee (30 January 2006), http://thetyee.ca/Views/2006/01/30/DefendNorthwestPassage/.

 Canada Gazette, Pt. II, Vol. 119, No. 20, p. 3996 (10 September 1985); and, Andrea Charron, "The Northwest Passage in Context," *Canadian Military Journal* (Winter 2005-2006), 43, 47. Canada claimed that the passage of the Polar Sea was made under its permission, which the U.S. denied.
Ed Struzik, "Who's Guarding our Back Door?," *TheStar.com* (18 November 2007), http://www.thestar.com/ArcticInPeril/article/277429.

11. Michel Chossudovsky, "New Cold War: Simultaneously, Russia and America Conduct Major War Games," *GlobalResearch.ca* (16 October 2007), http://www.globalresearch.ca/index. php?context=va&aid=7098; and, "Canada Seeing Increased Russian Activity in Arctic," *javno.com* (29 August 2008), http://www.javno.com/en/world/clanak.php?id=176887.

12. ----, "Arctic Sovereignty: No More Northern Lite," *TheChronicleHerald.ca* (15 January 2008), http://thechronicleherald.ca/Editorial/1100831.html ; and, ----, "Bush Signs New Arctic Policy, Outlining U.S. Intentions in the North," CBC.ca (12 January 2008), http://www.cbc.ca/canada/north/ story/2009/01/12/bush-arctic.html.

13. Randy Boswell and Mike De Souza, "Time to 'Use it or Lose it,' Harper Declares," *Canada.com* (11 August 2007), http://www.canada.com/montrealgazette/news/story.html?id=f1cbc914-e437-4378-b1be-91c47540631c&k=2141; and, ----, "PM Starts Fight for North," *TheStar.com* (10 August 2007), http://www.thestar.com/News/article/245117.