The Changing Arctic: Sovereignty, Resources and Security

KINGSTON CONFERENCE ON INTERNATIONAL SECURITY

13-15 June 2011 Kingston, Ontario
Dear Conference Participant:

On behalf of the Centre for International and Defence Policy and the Chair of Defence Management Studies at Queen’s University, the United States Army War College, and the Canadian Forces’ Land Force Doctrine and Training System, we are pleased to welcome you to the sixth annual Kingston Conference on International Security. These conferences reflect our continuing commitment to facilitating discussions, debate and research on security issues of concern to the people and governments of the United States and Canada.

This year’s conference focuses on The Changing Arctic: Sovereignty, Resources and Security. Starting from an overview of the geopolitical, legal and institutional framework in which the international relations of the Arctic have emerged to current prominence, the conference will move to a close analysis of three important clusters of issues that engage the states and peoples of the region. The first of these concerns the questions of sovereignty and borders so often highlighted in current commentary. The second is centred on the interplay between environmental change and the growing competition for resources. The third explores issues of national and international governance in the region and the prospects for a more effective multilateral regime to manage potentially damaging conflicts.

We invite you to join us in these discussions and to contribute your ideas to the development of effective responses to the promise and the problems that the emergent Arctic presents to the governments and peoples of the region, and to the wider world.

Sincerely,

Charles Pentland
Centre for International and Defence Policy

Douglas Bland
Defence Management Studies
The history of Kingston dates back to 1673 when Robert Cavelier de La Salle, on behalf of the Governor of Nouvelle-France, chose Cataraqui as the site for a fortified trading post of the same name. Later Fort Cataraqui was renamed Fort Frontenac.

In 1687 war broke out between the French and the Iroquois. Two years later the French abandoned the fort to the Iroquois, who destroyed it. The site remained in ruins until 1695 when, after the development of peaceful relations between the two sides, the fort was both reoccupied and rebuilt by the French, who maintained their rule over it for many more years.

Under French rule, Fort Frontenac was used as a key point in attacks against both the Iroquois and British forces on various occasions. However, during the Battle of Fort Frontenac in 1758, the fort was captured by the British and again destroyed.

During the War of 1812 Kingston was the base for the Lake Ontario division of the Great Lakes British naval fleet which engaged in a vigorous arms race with the American fleet, based at Sackett’s Harbor, New York for control over Lake Ontario. After the war, the British built Fort Henry and a series of Martello towers to guard the entrance of the Rideau Canal. Fort Henry still stands today and has become a popular tourist destination. In 2007, the Rideau Canal and the fortifications at Kingston were designated a UNESCO World Heritage Site.

Kingston's location at the Rideau Canal entrance to Lake Ontario made it the primary military and economic centre of Upper Canada. Incorporated as a town in 1838, Kingston had the largest population of any centre in Upper Canada and maintained this distinction until the 1840s. In 1846 Kingston was incorporated as a city.

Prior to Confederation, the city was a candidate for becoming the capital of Canada. However, after a brief stint as capital from 1841 to 1844 (including the first meeting of the Parliament of the United Canadas on June 13, 1841), it lost its position to an alternating location of Montreal and Toronto, and then to Ottawa in 1857. Kingston was the home of Canada's first Prime Minister, Sir John A. Macdonald.

It was also during the mid 1800s that the Church of Scotland selected Kingston as the Canadian location for a school. The purpose of this school was to prepare clergy members for service as well as to enlighten others in the subjects of science and literature. What started as a simple
facility with one professor and a few students has evolved into the world-renowned Queen’s University. This small beginning has promoted Kingston as a centre for knowledge-based industry. Several predominant names in health sciences, environmental services and products, technology firms, as well as information technology and telecommunications have research and development facilities in Kingston.

Thus began a surge of knowledge in Kingston, and the arrival of other institutions such as The Royal Military College of Canada, St. Lawrence College, and the Canadian Armed Forces School of Communications and Electronics. This has promoted Kingston as a centre for knowledge-based industry. Several predominant names in health sciences, environmental services and products, technology firms, as well as information technology and telecommunications have research and development facilities in Kingston.

During the late 19th and early 20th centuries Kingston was an important Great Lakes port and a centre for shipbuilding and locomotive building including the largest locomotive works in the British Empire which closed in 1969. Most heavy industry has now left the city and employment is now primarily in the federal institutional, military, and service/retail areas.

Kingston is known unofficially as the “home of the army.” Fort Frontenac was, before the First World War, home to one of the two regular force artillery batteries in the nascent Canadian army. Fort Frontenac is, to this day, an active military establishment and has long been the home of the Canadian Army Staff College in its many variations over the years. The city is also home to The Royal Military College of Canada, Canadian Forces Base, Kingston, and the Canadian Forces School of Communications and Electronics and several Reserve Force army, naval, and Communications units.

The diversity of Kingston’s numerous attractions is great. For those interested in history, Kingston has 17 museums and several more historic locales. Site of the 1976 Olympic sailing competition, Kingston quickly became known as the fresh-water sailing capital of the world, and has gained popularity in shipwreck diving. Because of the coolness of the waters, several wrecks dating as far back as the mid 1800s can be visited in waters less than 120 ft. deep.

In 2008 Kingston was ranked as one of the top 5 most desirable places to live in all of Canada.
# AGENDA

**MONDAY, 13 JUNE 2011**  
FORT FRONTENAC OFFICERS MESS

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| 1730 | WELCOME MEET AND GREET  
**Major-General Steve Bowes**, *Land Force Doctrine & Training System (LFDTS), Canadian Forces* |

**TUESDAY, 14 JUNE 2011**  
ST. LAWRENCE BALLROOM, RESIDENCE INN BY MARRIOTT

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| 0730 | Registration and Breakfast  
*St. Lawrence Foyer and West Seventy6 Grill* |
| 0830 | INTRODUCTION – Master of Ceremonies  
**Colonel Brian McPherson**, *Land Force Doctrine and Training System, Canadian Forces* |
| 0845 | WELCOME TO THE CONFERENCE  
**Dr. Charles Pentland**, *Centre for International and Defence Policy, Queen’s University* |
| 0900 | CONFERENCE OVERVIEW  
**Dr. Peter Harrison**, *School of Policy Studies, Queen’s University* |
| 0930 | KEYNOTE SPEAKER  
**Tony Penikett**, *Penikett Negotiations Inc.* |
| 1030 | Break |
| 1100 | PANEL I: CONFLICT & COOPERATION: THE GEO-POLITICS OF THE ARCTIC  
Chair: **Dr. Stanley Byron Weeks**, *Center for Naval Analyses, US*  
Speakers:  
**Professor Stéphane Roussel**, *Université du Québec à Montréal*  
**Caitlyn Antrim**, *Rule of Law Committee for the Oceans, U.S.*  
**Dr. Suzanne Lalonde**, *Université de Montréal* |
| 1300 | Lunch with KEYNOTE SPEAKER  
**Commodore John Newton**, *Maritime Staff, Canadian Forces* |
| 1430 | PANEL II: SOVEREIGNTY: BORDERS AND SECURITY  
Chair: **David Sproule**, *Department of Foreign Affairs Canada*  
Speakers:  
**Dr. Rob Huebert**, *University of Calgary*  
**Dr. Pavel Baev**, *International Peace Research Institute, Oslo*  
**Niklas Granholm**, *Swedish Defence Research Agency*  
**Dr. Lassi Heininen**, *University of Lapland, Finland* |
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<td>1630</td>
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| 1830 | Dinner  
1000 Islands Cruises  
boarding at Confederation Basin docks |
| **WEDNESDAY 15 JUNE 2011**  
**ST. LAWRENCE BALLROOM, RESIDENCE INN BY MARriott** |
| 0730 | Breakfast  
St. Lawrence Foyer and West Seventy6 Grill |
| 0830 | KEYNOTE SPEAKER  
**Rear Admiral David Titley,** *Oceanographer of the Navy, US Navy* |
| 0930 | Break |
| 1000 | PANEL III: THE RUSH FOR RESOURCES: COSTS AND BENEFITS  
Chair: **Brigadier-General (Ret) William (Bill) Richard,** *Queen’s University*  
Speakers:  
**Mr. Peter Slaiby,** *Shell Oil Alaska Venture*  
**Professor Marianne Douglas,** *Canadian Circumpolar Institute, University of Alberta*  
**Captain(N) James Fisher,** *Office of Emerging Policy, United States Coast Guard* |
| 1230 | Lunch with KEYNOTE SPEAKER  
**Professor Lawson Brigham,** *University of Alaska* |
| 1400 | PANEL IV: STEPPING INTO THE FUTURE  
Chair: **Thomas Axworthy,** *The Walter and Duncan Gordon Foundation*  
Speakers:  
**Professor Peter J.V.C. De Groot,** *Queen’s University*  
**Udloriak Hanson,** *Inuit Tapiriit Kanatami*  
**Dr. Andrea Charron,** *Carleton University* |
| 1615 | CLOSING REMARKS  
**Professor Douglas Lovelace,** *Strategic Studies Institute, U.S. Army War College* |
ARTIC CHANGE

Dr. Peter Harrison
Professor, Stauffer-Dunning Chair and
Director, School of Policy Studies, Queen’s University

Arctic change is now a constant. This presentation will review some of these changes, and their implications for Canada and northern communities. The focus will be the major challenges and opportunities associated with increased access to the region because of rapidly changing ice conditions. A brief review of recent actions by the Government of Canada and the Arctic Council will be presented, including the recent binding agreement among the eight members of the Arctic Council to cooperate on marine Search and Rescue (SAR) (Nuuk Declaration, May 12th, 2011) http://www.arctic-council.org/

2013 will be an important one for the Canadian Arctic. In that year Canada will be presenting its scientific and legal brief on the extension of jurisdiction over the seabed (Article 76, United Nations Convention on The Law of the Sea) in our three ocean areas to the United Nations Commission on the Limits of the Continental Shelf. Canada will also take over the Chair of the Arctic Council for a two-year period in 2013, followed by the United States in 2015. What is the major issue that both jurisdictions should focus on during their Arctic leadership mandate? The argument will be made that this should be the protection of Arctic fish stocks.

The presentation will conclude with a brief description of the results of the International Polar Year (IPY) activities undertaken by Canada and others, and will outline the objectives of the third and final international IPY Conference “From Knowledge to Action” to be held in Montreal from 22-27 April, 2012 under the chairmanship of the author.

THE NEW ARCTIC SECURITY: SOVEREIGNTY, PROSPERITY AND COOPERATION

Caitlyn L. Antrim
Executive Director, Rule of Law Committee for the Oceans, Washington

From World War II through the Cold War, national security was largely defined by military power, the industrial strength to support military capacity and the alliances that were sheltered by that power. In the two decades since the breakup of the Soviet Union and the demise of the east-versus-west security paradigm, concepts of national security have been reconsidered. While the old alliances have not disappeared, a new view of security based on sovereign borders and rights, prosperity and international cooperation has begun to emerge. This is particularly true in the case of the Arctic where increased access to the Arctic Ocean, with its resources and trade routes, has moved away from the competitive, zero-sum approach projected by commentators only five years ago. In its place is a
structure of mutually accepted borders and sovereign rights, widely accepted principles and norms for sustainable development and creative mechanisms for peaceful cooperation. This new approach is still young and it is too early for a judgement to be made about its long term stability, but there is hope that through the UN Convention on the Law of the Sea, Agenda 21 (the action plan for sustainable development adopted at the Rio Conference in 1992) and the innovative regional role and processes of the Arctic Council, the states and peoples of the region will have a strong foundation for peaceful development of prosperity in the Arctic. It is notable that geography positions Russia and the United States, the primary antagonists in the old security regime, to be leaders in the development of the new Arctic. The success of this new security regime will depend in no small part on developing a new partnership between these former adversaries that fosters peace and prosperity across their shared maritime boundary.

**INTERNATIONAL LAW: A STABILIZING FORCE IN THE ARCTIC?**

Professor Suzanne Lalonde

*Faculty of Law, Université de Montréal*

Increased access to the Arctic region, thanks to dramatic changes in its physical environment, has created new challenges and opportunities. The critical question for the Arctic States is how best to manage these new challenges and opportunities. Canada, along with the other four Arctic coastal States has pledged, very publicly, its commitment to the existing international legal framework. This brief presentation will attempt to evaluate to what extent international law is a stabilizing force. Can the international legal framework, in which so much faith is placed, guarantee the peaceful and equitable reconciliation of competing interests in the Arctic?

**THE CANADIAN FORCES AND THE ARCTIC**

Commodore John Newton

*Director-General Naval Personnel, Maritime Staff, Canadian Forces*

Vast, remote and austere; unsurpassed in beauty and promise of future riches; and absolutely unforgiving to the unprepared: this is the Arctic, Canada’s ocean of destiny and parable of change for this 21st century. Cmdre Newton will describe why the Canadian Forces is hastening the capabilities that will underwrite the peaceful development of Canada’s High North in a region of the world that will see more change in the coming decades than has occurred since Europeans first gained a foothold in Greenland.
THERE SOLUTION OF BOUNDARY ISSUES IN THE ARCTIC IS ONLY THE BEGINNING...

Professor Rob Huebert
Associate Professor, Department of Political Science; and
Associate Director of the Centre for Military and Strategic Studies, University of Calgary.

When the Russian and Norwegian Governments announced that they had settled their northern waters boundary dispute, observers were both surprised and delighted. Most saw this as one of the clearest indications that the arctic region was entering a new era of cooperation. For many, the fact that this dispute which had existed for over 40 years was now resolved was the best proof possible that all of the arctic boundary issues would soon be peacefully and cooperatively resolve. This in fact may be the case. But it is not commonly recognized that the determination of boundaries is only the beginning of the challenges facing a cooperative and peaceful regime in the Arctic and is not the end.

What confounds most efforts understand boundaries in the circumpolar north is the fact that the arctic is primarily a maritime region. This means that the boundaries that exist in this region do not for the most part determine sovereignty but rather only determine variations of sovereign rights. Thus the issue of navigation through the waters of both Russia and Canada remains contested. The determination of the outer boundaries of the continental shelf will still need to be resolved. But after this, the real issues will revolve around the use of these regions for both coastal and international actors. How the coastal states and maritime states respond to the new uses of a melting and increasingly accessible arctic will determine if the success of boundary delimitation can be matched by the peaceful and equitable use of the maritime zones determined by these new boundaries.

THE ARCTIC REALPOLITIK RUSSIAN-STYLE: SOVEREIGNTY MATTERS

Pavel Baev
Fellow; International Peace Research Institute, Oslo

The Arctic is not a geopolitical frontier where the natural riches are up for grabs, and neither is it a theater of military operations where the size of a littoral state’s Navy determines its ability to advance its interests. It is a thoroughly regulated international environment where the state actors have shown commitment to play strictly by the rules established by multi-national institutions, of which the Arctic Council has managed to strengthen its profile of recent.

Russia is often a prime suspect in aggressive unilateralism but in fact, its record is spot-less, and the unexpected but firmly finalized border deal with Norway makes it a top-grader. It is possible that in 2007-2008, Moscow entertained some ideas about making use of its military superiority in the High North (secured by the very diminished Northern Fleet) but the conclusion about non-existent political dividends was reached in the early days of the US-Russian ‘reset’. Demonstrating preference to cooperative solutions, Russia nevertheless puts the idea of sovereignty first and has strong reservations against the notion of ‘global commons’ as applied to the Arctic.
There is more to this focusing on sovereignty that just the desire to secure control over the maximum possible share of the imagined rather than explored natural resources. Russia has accumulated considerable experience in developing oil and gas fields on-shore in the extreme conditions and in trying to advance off-shore projects, so illusions that are so prevalent in public discourse hardly have an impact on decision-making. What does have an impact is the assessment that the Arctic constitutes a remarkably significant element of Russia’s national identity, fragile as it is, and this connection is politically exploitable.

The central issue in this political prioritization of the Arctic is the claim for expanding Russia’s EEZ, which is yet to be re-submitted to the UN CLCS. The best option appears to be to coordinate Russia’s ambitions with those of Canada and Denmark, but the plan to divide the ‘disputed’ waters three ways might not be universally cheered. Moscow remains deeply suspicious about the US non-ratification of the UNCLOS.

**Changes on Northern Geopolitics - From a Frontier (of Confrontation) to a Region (of Peace)**

Dr. Lassi Heininen

*Professor, University of Lapland, Finland*

*Northern Research Forum*

After the end of the Cold War there have been significant environmental and geopolitical changes, and changes in security matters in the Arctic. In spite of some disputes on maritime borders, asymmetric environmental conflicts and global problems, and claims by indigenous peoples, there is an increasing international cooperation (by states and non-state actors) on civilian issues as well as region-building (with nations as major actors) which have generated a greater sense of stability and cooperative security. This has been so successful that the Arctic states are in a situation that their ‘mission’, i.e. the ultimate goal to decrease military tension (of the Cold War) and increase political stability, has been accomplished. Yet, this state of high stability and peacefulness is neither given nor determined, and there are more rules of soft law than those of (legally-binding) international treaties.

The major military structures and capability (of the Cold War), such as the nuclear weapon systems, are still in the circumpolar North (though they are not against the region per se). Furthermore, the region has both retained its high military-strategic significance due to its geopolitical and -strategic position, and the high stability has not (yet) transformed into real (nuclear) disarmament, and got higher strategic importance due to other reasons, such as its energy resources and potential global sea routes. The Arctic has also become an environmental linchpin and a laboratory (or workshop) for the environment and climate change. As a consequent of this the very meaning of security has being extended in discourses on northern security beyond traditional concerns with “military” threats, and national security and state sovereignty, to focus on environmental, societal and human problems. The main focus of the presentation is first, to describe main stages and relevant
changes of Northern security and understanding of security; second, to discuss on special features (of Northern security) which represent comprehensive security, such as nuclear safety and climate change; and third, to analyze what kind of change(s) there have been in problem definition on security discourses and premises. Final, to discuss on a state of Northern security, if all this would indicate a change in problem definition of security paradigm, and what kind of role circumpolar stability, or the Nordic peace, could play there.

**Arctic Security and the US Navy**

Rear Admiral David. W. Titley  
*Oceanographer and Navigator of the Navy, U.S. Navy, Washington*

While the international scientific community pays increasing attention to the understanding and prediction of Arctic climate change, the U.S. Navy is addressing the impact of increased human activity on regional security. With the continued decline in summer sea ice, the Arctic has already seen a significant increase in activity, including destination shipping, adventure tourism, extended continental shelf (ECS) surveys and claims, and the consideration of Arctic change in national strategies and policies. While there are great uncertainties in the prediction of the physical environmental in the Arctic it is even more difficult to predict the impact of human activity. The future of fishing, resource extraction, trans-Arctic shipping, and security activity in the region remains an open question. Thus, it is important for both Arctic and non-Arctic nations to cooperate in ways that build trust and confidence in an environment of openness and transparency. The U.S. Navy's Arctic Roadmap and Strategic Objectives for the Arctic highlight this, focusing on the opportunities of cooperative partnerships that address the common strategic challenges associated with Arctic change.

**The Offshore: The Next Chapter in Alaska’s Oil and Gas History**

Peter Slaiby  
*Vice President, Shell Alaska*

Shell has a long history in Alaska that dates back nearly 60 years. Shell was one of the original explorers in Alaska, including on the North Slope where Prudhoe Bay was eventually discovered. Even in the early years Shell was known as a company that specialized in the offshore. Ultimately, that would become our legacy in Alaska. Shell pioneered Alaska’s Cook Inlet in the 1960’s despite harsh forces of nature some considered too rugged to overcome. The platforms Shell installed were sold in 1998 but they are still producing today. Shell drilled the majority of the wells in the Beaufort Sea in the 1980s and 1990s and drilled 4 of the 5 wells ever drilled in the Chukchi Sea. Those wells were eventually capped.

Shell re-entered Alaska in 2005 after purchasing OCS leases in the Beaufort Sea. Subsequent lease sales netted Shell more acreage in the Beaufort. Today, Shell owns outright or holds an equity position in 151 Beaufort Sea lease blocks. In February 2008, Shell became the
major leaseholder in the Chukchi Sea following Lease Sale 193 in which Shell bid a record $2.1 billion for 275 lease blocks. Since re-entering Alaska, Shell has spent over $3.5 billion attempting to drill again in the Alaska OCS.

Conservative estimates from the MMS/USGS place roughly 25 billion barrels of oil and over 120 TCF of gas in the Alaska OCS. Against the backdrop of the roughly 16 billion barrels of oil that have been produced over the last 30 years on Alaska’s North Slope, that kind of materiality is potentially a game-changer, not just for Shell and Alaska, but the entire Nation as we consider the associated jobs and energy security that could come as a result of offshore production.

Clearly, the Alaska offshore is important to the United States, to Shell and to Alaskans who want to extend the life of the Trans Alaska Pipeline.

THE RUSH FOR RESOURCES: DID THE BERGER INQUIRY AND NORWAY GET IT RIGHT?
Professor Marianne Douglas
Director, Canadian Circumpolar Institute, and Professor, Earth and Atmospheric Sciences, University of Alberta

Rapidly shifting environmental conditions, such as the receding polar ice cap and melting permafrost, in high latitudes are opening up vast areas to exploration for both offshore petroleum fields and land-based mineral deposits. The rush for resources in the circumpolar north affects a huge geographical area that includes both marine and land-based deposits. Discussions regarding the opening of the North for resource extraction have identified the important need for a balance between economic development and environmental protection. This concept was the ideal product of the Mackenzie Valley Pipeline Inquiry that began in 1974. Based on evidence of extensive social, economic and environmental negative impacts, the Berger Report recommended a ten year moratorium on any pipeline development in the Mackenzie Valley. Over that decade, important issues such as land claim settlements, stewardship of the environment, and revenue sharing concerns would be addressed so that indigenous peoples living in the North, whose livelihoods would be most affected by resource exploration and extraction would be equal partners. Several nations, including Australia, the US and Norway have developed various models in revenue sharing that build upon governance, stewardship and capacity building within the North. These considerations are especially important for Canada’s northern territories which are undergoing devolution. As new responsibilities are thrust upon nascent governing bodies, the need for balance between natural resource revenues and future enviro- and socio-economic conditions is increasingly apparent.
There is need for Arctic nations and people to outline guiding principles that will conserve natural environmental conditions and preserve land-based lifestyles. This applies to mineral exploration and extraction including uranium, and the oil and gas industry. Are the technologies advanced enough to ensure protection of these sensitive and extreme environments? National and international policies are needed. Arctic peoples health and wellbeing could benefit from the inevitable natural resource developments. But only if done right.

**UNCERTAINTIES, SCENARIOS & WILD CARDS - PLAUSIBLE FUTURES FOR THE ARCTIC MARITIME REGION**

Professor Lawson Brigham  
*Professor, University of Alaska Fairbanks*

The Arctic Marine Shipping Assessment of the Arctic Council (2005-09) used a scenarios creation process to investigate the drivers and uncertainties of future Arctic marine navigation.

Included among the factors deemed most influential by the AMSA Team are: global oil prices; legal stability & overall governance of Arctic marine use; climate change severity; new natural resource discoveries; limited windows & seasonality for Arctic marine operations; IMO mandatory agreements for Arctic ship construction & ice navigation; and more. These factors and uncertainties illustrate the complexity and broad, global connections that can influence a wide variety of future marine uses of the Arctic Ocean. The AMSA Team was, however, able to identify two primary factors ~ resources & trade, and governance ~ as anchors, or axes of uncertainty, to build a scenarios matrix used to develop a set of plausible futures.

Several recent events can be viewed as ‘wild cards’ that can plausibly influence the direction of the Arctic’s future. For example, the planting of a Russian flag at the bottom of the North Pole in August 2007 caught the attention of the entire globe......so did the BP Deepwater Horizon spill in 2010. The recent tragedy in Japan can have major implications for future nuclear power and thus could potentially increase the demand for Arctic (and global) oil and gas. The economic linkages of the Russian Arctic to markets in China using summer operations along the Northern Sea Route has been a relatively rapid development. More wild cards can also be identified using unconstrained thinking, and the interplay of globalization, climate change and regional geopolitics in the Arctic provides a dynamic environment in which to select a set of plausible wild cards in an uncertain future.
POLAR BEARS AND SOVEREIGNTY: A CASE STUDY OF A UNIQUE AND RESEARCH AND MILITARY COLLABORATION

Professor Peter J.V.C. de Groot,
Department of Biology, Queen’s University

The logistic challenges of conducting scientific field work in the Arctic present unique opportunities for collaboration between the Canadian Military and Civilian groups like scientific researchers. In this work, I detail a case study of this collaboration. This collaboration has two aspects to it – smaller scale ongoing research activities and larger scale logistic support. We have been conducting research into non-invasive methods of monitoring polar bears in the lower portions of M’Clintock Channel in Nunavut for 7 years. This work has been launched out of the communities of Cambridge Bay, Gjoa Haven and Taloyoak. This is labour intensive work on the sea ice requiring the skills of local Inuit hunters to collect polar bear hair, scat and footprint data. These tissue and data are then analyzed back at Queen’s University and University of Toronto. This recurring work has great collaborative potential. Recently we received funding as part of Canada’s economic action plan to enhance and build research cabins at four remote locations in the passage. The transport of this material to the three communities was perfunctory, while the transport of this material to the build sites was to be a challenge. Most of the material could not be transported in a twin otter and had to be transported by snowmachine. The majority of this task was ably completed by the 1-Canadian Ranger Patrol Group (1-CRPG) through a mass exercise out of the communities of Gjoa Haven and Taloyoak. The subsequent construction of these cabins was also assisted by 1-CRPG personnel who provided bear deterrence and escort services to the building crew. The success of this exercise bodes well for ongoing collaborations of this scale with 1-CPRG and other research initiatives. For both groups this was the first such collaboration and in this presentation I will detail the steps needed to ensure a productive relationship among 1-CRPG and researchers in the Arctic.

CANADA, THE ARCTIC AND 2013

Dr. Andrea Charron
Associate Professor, Carleton University; War Studies Program, Royal Military College of Canada

In 2013, Canada shall assume the two-year Chairmanship of the Arctic Council - a high-level forum for cooperation, coordination and interaction between Arctic states, indigenous communities and other Arctic residents on issues such as sustainable development and environmental protection. The US shall follow Canada and assume the Chair in 2015 until 2017. The expectation is that the agendas set by the North American Chairs be complementary.
What should issues should Canada champion? How will it build on the spirit of cooperation amongst the Arctic states? What other issues must Canada tackle that are outside of the Council’s purview? This paper explores Canada’s Arctic “to do” list for 2013 and beyond. Some of the issues discussed include: observers and the Arctic Council; operationalizing the new Search and Rescue Agreement; submission of scientific data to the Commission on the Limits of the Continental Shelf; promotion and adoption of the International Maritime Organization’s Polar Code; and continued discussions with the US to promote a coordinated (even seamless?) North American Council agenda.
Major-General Steve S.J. Bowes
Commander, Land Force Doctrine and Training System, Canadian Forces

Major-General Stephen J. (Steve) Bowes enrolled in the Canadian Forces in 1985. He served in a variety of positions and locations during his formative years, first with the 8th Canadian Hussars (Princess Louise's) through tours in Petawawa, Germany, and Moncton. He also served in Gagetown with the Armour School and finally with the 12e Régiment Blindé du Canada in Valcartier as a Squadron Commander. Promoted to Lieutenant-Colonel in 2000, he was employed as the G3 of CTC before taking command of the Armour School in 2003, and also serving as Deputy Director Armour Corps.

Major-General Bowes was promoted to Colonel in April 2005 and subsequently appointed the first Commander of the Kandahar Provincial Reconstruction Team. He deployed to Kandahar on Operation ARCHER Rotation 0 from July 2005 to February 2006 under an Operation ENDURING FREEDOM mandate. In May 2006, he was appointed Deputy Commander Standing Contingency Force in Halifax and participated in the Integrated Tactical Effects Experiment (Sea-Land-Air) culminating in a LIVEX along the Atlantic seaboard in November 2006. In June 2007, he assumed formation command and was appointed Commander Combat Training Centre Gagetown. In September 2009, he was promoted to his present rank and appointed Deputy Chief of Staff Plans and Projects for the standup of the new International Security Assistance Force Joint Command (IJC) Headquarters in Kabul. Brigadier-General Bowes recently returned home to take command of Land Force Atlantic Area. He was promoted to Major-General in June 2011, and took command of Land Force Doctrine and Training System in Kingston on 13 June 2011.

Major-General Bowes graduated from Acadia University in 1981 with a Bachelor of Arts in History, and in 1982 with a Bachelor of Arts Honours in Political Science. In 1985, he graduated from Queen’s University in Kingston with a Master of Arts in Political Studies. He is also a graduate of the Canadian Land Forces Command and Staff College Course and the Canadian Forces College Command and Staff Course.

Major-General Bowes has been awarded the Meritorious Service Cross, the Meritorious Service Medal, presented the United States Bronze Star Medal, and awarded the Chief of the Land Staff Commendation.

His hobbies include reading, long walks, and golf where his "Foot Wedge" is by far his best club.
DR. CHARLES PENTLAND
Professor, Department of Political Studies, Queen’s University

Charles Pentland is Professor of Political Studies at Queen's University, in Kingston, Ontario, Canada, where he teaches courses on international organization and global governance. He holds a BA and an MA from the University of British Columbia and a PhD in International Relations from the London School of Economics. He has held visiting positions at Carleton University, the University of Manitoba, and the University of Cambridge. He served as Director of Queen’s University’s Centre for International Relations from 2002 to 2010.

For the past several years his research and publications have focused on the external relations of the European Union, especially its eastward enlargement, its role in the Balkans, its relations with the former Soviet Union, and its Common Foreign and Security Policy. He has also written on Canadian foreign policy and transatlantic relations, and is co-editor of a volume on Canadian and German views of NATO’s mission in Afghanistan, entitled The Afghanistan Challenge: Hard Realities and Strategic Choices (McGill-Queen’s University Press, 2009).

DR. PETER HARRISON
Professor, Stauffer-Dunning Chair and Director, School of Policy Studies, Queen’s University

Dr. Peter Harrison is Professor, Stauffer-Dunning Chair and Director of the School of Policy Studies (SPS) at Queen’s University (Kingston, Ontario). From 2008-2009 he was the Skelton-Clark Fellow in the School.

Dr. Harrison’s career as a senior member of the Public Service of Canada lasted nearly 30 years. During this time he served as the Deputy Minister (Permanent Secretary) of a number of federal Departments including Natural Resources Canada, the Department of Fisheries and Oceans, the Leadership Network, the National Research Council of Canada (Senior Research Fellow, Oceans) and Indian Residential Schools Resolution Canada.

Dr. Harrison was responsible for shepherding the ratification of the United Nations Convention on the Law of the Sea (UNCLOS) by the Government of Canada in 2003; the investment of $150 million in the International Polar Year; and, as Senior Associate Deputy Minister of the Department of Indian and Northern Affairs, the development of the Government’s current Northern Strategy, the commitment to a new “High Arctic research Station”, and the Canada-UK Memorandum of Understanding regarding Arctic Research.
Dr. Harrison has also served as Associate and Assistant Deputy Minister in a variety of Departments, including: the Department of Finance, Human Resources Development Canada, and Revenue Canada. From 1989-1992 he was Secretary to the Priorities and Planning, Operations, and Expenditure Review Committees of the federal Cabinet in the Privy Council Office.

Dr. Harrison is a Geographer by profession. He holds a B.A. Hon. (1st cl.) from the London School of Economics and Political Science; an M.A. from the University of Victoria (British Columbia), and a Ph.D. from the University of Washington (Seattle). From 1973-1981 he was a Professor in the Department of Geography and Regional Planning at the University of Ottawa.

Dr. Harrison’s research, writing and teaching focus on ocean and coastal management with particular reference to the Arctic Ocean and Arctic policy.

He is a Fellow, Governor and Vice President of the Royal Canadian Geographical Society and a Fellow of the Royal Geographical Society, and was awarded the Gold Medal celebrating the Golden Jubilee of Her Majesty Queen Elizabeth II for his contribution to Public Service. Dr. Harrison is also a recipient of the J.B. Nicholls award for his lifetime contributions to ocean and coastal management in Canada and around the world.

**TONY PENIKETT**  
*Penikett Negotiations Inc.*

Tony Penikett’s 25 years in politics included: two years in Ottawa as Chief of Staff to federal New Democratic Party Leader Ed Broadbent MP; five terms in the Yukon Legislative Assembly; and two terms as Premier of Canada’s Yukon Territory. His government negotiated final agreement for First Nation land claims in the territory and passed pioneering education, health, language legislation, as well as leading a much-admired bottom-up economic planning process. Penikett entered politics after the miners at the northern Yukon Arctic asbestos mine, where he was shop steward, nominated him for the Territorial Legislature.


Currently a Vancouver-based mediator, Penikett teaches in Simon Fraser University's Master of Public Policy program. His recent work has taken him to the Eastern Arctic, Northern Europe, the Middle East and South America. All three of Tony’s children are television actors: Tahmoh (Battlestar Galactica, Dollhouse), and Sarah and Stephanie (The L Word and Psych).
**COMMODORE JOHN F. NEWTON**

*Director General Naval Personnel, Chief Maritime Staff, Canadian Forces*

Commodore John Newton is a graduate of Dalhousie University (BSc 1981). He enrolled in the Canadian Forces in 1983 after an early career as a geologist.

As a junior naval officer he acquired specialist skills in navigation, communications, and operations and completed tours in the destroyer *IROQUOIS*, replenishment ship *PRESERVER* and frigate *MONTREAL*. He has deployed on NATO missions of the Cold War, and UN peace support operations including the Gulf War in 1991, Haiti in 1993, and the maritime embargo of the former Yugoslavia in 1995. He has a developed specialty in Canadian maritime sovereignty gained through countless fishery patrols and three Arctic sovereignty missions.

He has commanded the patrol ship *HMCS ANTICOSTI*, and the frigate *HMCS FREDERICTON* from 2003 until 2006 where he experienced his life-long dream to patrol the fabled Northwest Passage.

In 2000 he completed a year of Joint military studies at the Command and Staff College Toronto followed by advanced military studies in 2004. He has held staff appointments in naval operations schools, Maritime Forces Atlantic Headquarters and Maritime Command Headquarters. Following his promotion to Captain(N) in 2006, he served at National Defence Headquarters in Ottawa as Director of International Plans in the Strategic Joint Staff, charged with files that included the commitment of the Canadian Forces in Afghanistan and Sudan amongst others. In 2008, he assumed command of Canadian Forces Base Halifax, a very large Canadian Forces Base and lead planning efforts to celebrate the Navy's Centennial, including Her Majesty's participation in the International Fleet Review.

Commodore Newton was promoted to his present rank in August 2010 and appointed Director General Naval Personnel.
REAR ADMIRAL DAVID W. TITLEY  
Oceanographer and Navigator of the Navy,  
Director, Task Force Climate Change, U.S. Navy

A native of Schenectady, N.Y., Rear Admiral Titley was commissioned through the Naval Reserve Officers Training Commissioning program in 1980.

Titley served over 10 years at sea, including a tour as navigator aboard USS Farragut (DDG 37), and tours as oceanographer aboard USS Belleau Wood (LHA 3), USS Carl Vinson (CVN 70), Carrier Group Six and U.S. 7th Fleet.

Shore tours include serving on the staff of the U.S. Commission on Ocean Policy and as the senior military assistant to the director of Net Assessment in the Office of the Secretary of Defense.

Titley has commanded the Fleet Numerical Meteorological and Oceanographic Center in Monterey, and was the first commanding officer of the Naval Oceanography Operations Command. He served his initial flag tour as commander, Naval Meteorology and Oceanography Command.

Education includes a B.S. in Meteorology from the Pennsylvania State University, a M.S. in Meteorology and Physical Oceanography and Ph.D. in Meteorology, both from the Naval Postgraduate School. He attended the Massachusetts Institute of Technology Seminar XXI on Foreign Politics, International Relations and National Interest, and is a fellow of the American Meteorological Society.

In 2009, Titley assumed duties as oceanographer and navigator of the Navy and director, Task Force Climate Change.

PROFESSOR LAWSON BRIGHAM

Professor, Department of Geography, University of Alaska, Fairbanks  
Senior Fellow, Institute of the North, Anchorage, Alaska

Dr. Lawson Brigham is Distinguished Professor of Geography & Arctic Policy at the University of Alaska Fairbanks, and a Senior Fellow at the Institute of the North in Anchorage. During 2005-2009 he was chair of the Arctic Council’s Arctic Marine Shipping Assessment and Vice Chair of the Council’s working group on Protection of the Arctic Marine Environment. Dr. Brigham was a career U.S. Coast Guard officer serving from 1970-95 and retiring with the rank of Captain. He served at sea in command of four Coast Guard cutters including a patrol boat, Great Lakes icebreaker, offshore law enforcement cutter, and the polar icebreaker Polar Sea sailing in Alaskan, Arctic & Antarctic waters; he also served as
Chief of Strategic Planning in Washington, DC. He has participated in more than 15 Arctic and Antarctic expeditions, including Polar Sea’s crossing of the Arctic Ocean in summer 1994.

Dr. Brigham has been a research fellow at Woods Hole Oceanographic Institution, a faculty member of the U.S. Coast Guard Academy and the Naval Postgraduate School, and Deputy Director of the U.S. Arctic Research Commission. He is a graduate of the U.S. Coast Guard Academy (BS), a distinguished graduate of the U.S. Naval War College, and holds graduate degrees from Rensselaer Polytechnic Institute (MS) and the University of Cambridge (MPhil & PhD). His research interests for more than three decades have focused on the Soviet/Russian maritime Arctic, Arctic climate change, marine transportation, sea ice remote sensing, Arctic environmental protection, and polar geopolitics. Captain Brigham was a 2008 signer of the American Geographical Society’s Flier’s and Explorer’s Globe, the Society’s historic globe that has been signed by more than 75 explorers of the 20th century. This signing was in recognition of Polar Sea’s voyages in 1994 becoming the first ship in history to reach the extreme ends of the global ocean (at the North Pole and in the Ross Sea, Antarctica at the closest navigable position to the South Pole).

**DR. STANLEY BYRON WEEKS**

*Research Analyst, Center for Strategic Studies, Center for Naval Analyses*

DR STAN WEEKS has extensive strategic and operational planning experience in business, defense, foreign policy, and international and regional security contexts. He joined Science Applications International Corporation (SAIC) in 1990, following a prior 24-year career in the U.S. Navy (including destroyer command as the flagship captain for NATO’s multinational standing naval force, and prior duty coordinating that multinational force’s operations from the flagships of admirals of the UK and Dutch Royal Navies, duty on the OPNAV staff as the first action officer and drafter of the Maritime Strategy in 1982-1983, and service as an OSD exchange officer to the State Department Politico-Military Bureau.) Since 2007, Dr. Weeks has assumed the status of a consulting employee at SAIC, training Navy staff on PPBE processes. Dr. Weeks since October 2007 has supported the Secretary of Defense and the Chairman of the Joint Chiefs of Staff as an Adjunct Professional Staff Member at the Institute for Defense Analyses (IDA), where his work has included Asia-Pacific engagement and force posture, Defense Planning Scenarios for QDR 2010, enhancing interagency effectiveness, and the outline for a new National Defense Strategy. Also, Dr. Weeks has worked on projects for the Center for a New American Security and the Center for Naval Analyses (CNA), where he is a Research Analyst in the Center for Strategic Studies. He has recently been designated a Visiting Fellow at the Corbett Centre for Maritime Policy Studies at the UK Joint Services Staff College.

Dr. Weeks has developed and led programs to support strategic planning for regional security for the Navy, OSD, the JCS, NATO, and the State Department, as well as regional Combatant Commanders and Navy Components in the Pacific, European, and Central Command regions.
His varied work in these areas included support to the Navy Staff in strategy development and in resource allocation (PPBE) processes. He supported the OSD Asia Pacific policy office in regional multilateral security cooperation and in regional missile defense planning, and led the study in Taiwan and China on Taiwan Missile Defense. He also coordinated the Senior Review Group for the missile defense feasibility studies for NATO. For JCS (J5), Dr. Weeks led the Pacific portion of the Overseas Basing Infrastructure study, and also helped develop the JCS template for Theater Engagement Planning. For Navy commanders in the Pacific and in Europe, Dr. Weeks led assessments for future regional missile defense and allied cooperation. Dr Weeks served two exchange tours with the State Department (in the Europe/NATO and the politico-military bureaus) during his Navy career, and more recently served the State Department as the maritime advisor on US delegations to the Middle East Peace Process negotiations and to the ASEAN Regional Forum security meetings. He assisted the Pacific Commander in the establishment and initial ministerial-level conferences of the Asia Pacific Center for Security Studies. He has supported the Central Command Commander in several capacities, including planning of annual strategy conferences, support for the Cooperative Defense Initiative with the GCC states, Egypt, and Jordan, and port security planning. From 1998 to 2000, Dr Weeks assisted the corporate officer responsible for business strategic planning in Latin America, including a $350 million joint venture in the region. From June 2004 to December 2005, Dr Weeks was the Naval Advisor in Tirana, Albania, developing and helping implement a comprehensive Transformation Plan for that country’s Navy/Coast Guard, drafting a National Military Strategy, and assisting with ongoing NATO Partnership for Peace planning in preparation for eventual NATO membership.

A 1970 graduate of the US Naval Academy, Dr. Weeks attended the University of Madrid, Spain (1974-1976) as an Olmsted Scholar (Political Science Doctoral courses and Latin American Studies post-Master’s courses.) He holds Ph.D. (1977) and M.A. (1974) degrees in International Studies from The American University, was a National War College faculty member (Department of Strategy and Joint Military Operations, and since 1994 has been an Adjunct Professor of the Naval War College, teaching the National Security Decision Making (NSDM) graduate course (strategy and force planning, and executive leadership) to Washington area students from the military, government agencies, and Congressional staffs. Dr Weeks is the author of the book “The Armed Forces of the USA in the Asia-Pacific Region” as well as over two dozen chapters and articles in books and journals. He has spoken to over sixty international war colleges, universities, and conferences (most recently in China, Japan, Canada, India, Estonia, Singapore, and Malaysia) on a variety of strategic planning, defense transformation, maritime and regional security topics. Since 1991, Dr Weeks has also been a military and naval analyst for CBS News, participating in dozens of television and radio broadcasts from CBS News New York headquarters during the 1991 Gulf War and the 2003 Iraq War.
Stéphane Roussel is Professor of Political Science at the Université du Québec à Montréal (UQAM). He is the Canada Research Chair in Canadian Foreign and Defence Policy and Director of the Observatoire de la Politique et de la Sécurité dans l’Arctique (OPSA). From 2000 to 2002, he was an Assistant Professor at Glendon College (York University) in Toronto where he taught international relations and security studies. He graduated from Université de Montréal (Ph. D., 1999).

He was President of the ISA Canada section in 2004-2005 and the Quebec Association of Political Science (SQSP) in 2010-2011.

Dr Roussel is a member of the Centre d’études des politiques étrangères et de sécurité (CEPES, UQAM), Fellow at the Canadian Defence & Foreign Affairs Institute (CDFAI, Calgary) and the Réseau francophone de recherche sur les opérations de paix (Université de Montréal). He works regularly with the Canadian Forces, at the Royal Military College of Canada (RMC, Kingston), the Canadian Forces College (CFC, Toronto) and the Security and Defence Forum (SDF, Ottawa).

His research interests relate to Canadian foreign and defence policy, with particular emphasis on the relations with the United States and European countries. He has also developed an expertise in related fields, such as international relations theory and military history. Dr Roussel has published several articles and books related to these themes, most recently, Politique internationale et défense au Canada et au Québec, Presses de l’Université de Montréal, 2007 (with Kim Richard Nossal and Stéphane Paquin), Culture stratégique et politique de défense ; l’expérience canadienne, Athéna, 2007, and L’aide canadienne au développement, Presses de l’Université de Montréal, 2008 (with François Audet and Marie-Eve Desrosiers)

He currently directs three research programs entitled “Competing Views of Emerging Challenges in the Arctic”, “The Continentalist Approach in Canadian Foreign Policy”, and “Quebec’s Public Opinion Attitude Toward International Security”. 
Caitlyn Antrim is the executive director of the Rule of Law Committee for the Oceans where she helps educate ocean and foreign policy decision makers about the UN Convention on the Law of the Sea. She has written and spoken extensively about the Convention with special interests in the mineral resources of the deep seabed and the governance of the Arctic Ocean as it becomes increasingly accessible.

Ms. Antrim has given presentations on the Arctic in an age of climate change to the Naval War College, the American Branch of the International Law Association, the United Nations and think tanks, research centers and universities and has addressed arctic issues in television and radio interviews.

In government service, Ms. Antrim served as Deputy US Representative and Representative of the Secretary of Commerce to the Third UN Conference on the Law of the Sea. At the conclusion of the negotiations she moved to the legislative branch to join the Congressional Office of Technology Assessment. Ms. Antrim is also an innovator in the application of information systems to the practice of diplomacy. In 1979 she introduced the first real time, on site computer analysis for conference diplomacy at the Law of the Sea Conference. She later directed the project on Computer Assisted Negotiation at the American Academy of Arts and Sciences. In 1993, she became the founding director of the Delegate’s Computer Information Center of the Intergovernmental Negotiating Committee on Drought and Desertification.

Ms. Antrim earned her SBME from the Massachusetts Institute of Technology and was commissioned in the U.S. Navy in 1971. On returning to civilian life, she returned to MIT to earn the professional degree of Environmental Engineer in 1977, specializing in ocean mineral development, international law and public policy.

Ms. Antrim’s recent publications include:

“The New Maritime Arctic,” Russia in Global Affairs, September, 2010;
“Russia and the Changing Geopolitics of the Arctic,” World Politics Review, March 2, 2009
PROFESSOR SUZANNE LALONDE  
*Professor, Faculty of Law, Université de Montréal*

Suzanne Lalonde is a professor of international law at the Law Faculty of the University of Montreal and a researcher associated with the ArcticNet network in Canada and the Geopolitics in the High North programme in Norway. She holds a PhD in public international law from the University of Cambridge, King’s College (1997). From 2004 to 2008, Professor Lalonde was involved in a multidisciplinary ArcticNet research project which studied the legal and political implications of a thawing and increasingly navigable Northwest Passage. As part of her research projects, Professor has travelled the Canadian and Norwegian Arctic. She is currently part of two research teams, funded by ArcticNet, which are studying Canada’s claim to jurisdiction over parts of the Arctic Ocean seabed and the emerging Arctic security environment. As well as writing on legal issues pertaining to the Arctic, Professor Lalonde has been invited to speak about Canadian sovereignty in the Arctic to Canadian, American and other foreign audiences.

DAVID SPROULE  
*Deputy Legal Adviser and Director General, Legal Bureau, Department of Foreign Affairs and International Trade*

David Sproule (BA Honours [Political Science], University of Alberta, 1978; LL.B, University of Alberta, 1981) joined the Department of External Affairs in 1981 and has served abroad in Singapore, Bangkok, Washington, Dhaka, Kabul, and again in Bangkok. In Ottawa, he served in the Economic Law Division, the Political Intelligence Analysis Division, the Legal Operations Division, the Privy Council Office, the International Economic Relations and Summit Division, the Legal Advisory Division, the Oceans and Environmental Law Division and the United Nations, Human Rights and Economic Law Division. From 2004 to 2005, he served as Canada’s High Commissioner to Bangladesh, from 2005 to 2007 as Canada’s Ambassador to Afghanistan, and from 2007 to 2009 as Canada's Ambassador to Thailand. Mr. Sproule assumed his current position as Deputy Legal Adviser July 2009.
ROB HUEBERT, PH.D
Associate Professor, Department of Political Science; and
Associate Director of the Centre for Military and Strategic Studies,
University of Calgary.

Rob Huebert is an associate professor in the Department of Political Science at the University of Calgary. He is also the associate director of the Centre for Military and Strategic Studies. He was a senior research fellow of the Canadian International Council and a fellow with Canadian Defence and Foreign Affairs Institute. In November 2010, he was appointed as a director to the Canadian Polar Commission. Dr. Huebert has taught at Memorial University, Dalhousie University, and the University of Manitoba. His area of research interests include: international relations, strategic studies, the Law of the Sea, maritime affairs, Canadian foreign and defence policy, and circumpolar relations. He publishes on the issue of Canadian Arctic Security, Maritime Security, and Canadian Defence. His work has appeared in International Journal; Canadian Foreign Policy; Isuma- Canadian Journal of Policy Research and Canadian Military Journal. He was co-editor of Commercial Satellite Imagery and United Nations Peacekeeping and Breaking Ice: Canadian Integrated Ocean Management in the Canadian North. He also comments on Canadian security and Arctic issues in both the Canadian and international media.

DR. PAVEL BAEV
Research Professor, International Peace Research Institute, Oslo

Dr. Pavel K. Baev is a Research Professor at the Peace Research Institute, Oslo (PRIO); he is also affiliated with the Centre for the Study of Civil War at PRIO. After graduating from the Moscow State University (MA in Political Geography, 1979), he worked in a research institute in the USSR Defence Ministry, received PhD in International Relations from the USA & Canada Institute, USSR Academy of Sciences (1988), and then worked in the Institute of Europe, Moscow, before joining PRIO in October 1992. In 1995-2001, he was the editor of PRIO’s quarterly journal Security Dialogue, and in 1998-2004, he was a member of PRIO Board. His research on the transformation of the Russian military is supported by the Norwegian Defence Ministry; other research interests include the energy and security dimensions of the Russian-European relations, and post-Soviet conflict management in the Caucasus and the greater Caspian area. His weekly column appears in Eurasia Daily Monitor (http://www.jamestown.org/programs/edm), and his latest book, Russian Energy Policy and Military Power, was published by Routledge, London in 2008.
NIKLAS GRANHOLM

Deputy Director of Studies at FOI, the Swedish Defence Research Agency, Division for Defence Analysis

Mr. Granholm currently heads a study project on behalf of the Swedish Ministry for Defence studying the strategic developments in the Arctic. Mr. Granholm was seconded to the Swedish Ministry of Defence in 2007. During 2006 he was a Visiting Fellow to RUSI in London, UK and is an Associate Fellow of the Institute since 2007. Between 1999 and 2006, he headed the project for international peace-support and crisis management operations on behalf of the Swedish Ministry of Defence. Between 1997 and 1999 he was seconded to the Swedish Ministry for Foreign Affairs, Division for European Security Policy.

He is a Fellow of the Royal Swedish Academy of War Sciences since 2009 and Corresponding Fellow of the Royal Swedish Society for Naval Sciences since 2002. He is a member of the Swedish Society of International Affairs (Utrikespolitiska samfundet) since 2009 and a member of the editorial board of the Swedish quarterly Our Defence (Vårt Försvar) since 2001. Since 2005 he is member of the board of the Swedish Commission of Military History, affiliated to the International Commission of Military History in Geneva (Commission Internationale d’Histoire Militaire). He is a member of the International Institute of Strategic Studies, IISS since 1999.

Mr. Granholm’s main fields of interest are future threat developments, strategy, the Arctic, Nordic and Baltic security issues, international crisis-management and peace-support operations, nuclear issues, naval and maritime issues and military history.

Since his employment at the FOI in 1995, Mr. Granholm has contributed to a number of defence and strategy related publications, including the RUSI Journal and the IISS Strategic Survey. A graduate of Stockholm University, he holds a BA in Political Science and History. He is a reserve officer in the Swedish Amphibious Corps with the rank of Major.
**DR. LASSI HEININEN**

*University Lecturer and Adjunct Professor (Docent) at Faculty of Social Sciences, University of Lapland, Finland*

Among his other academic positions are Adjunct Professor at Frost Center for Canadian Studies, Trent University, Canada; Adjunct Professor at Faculty of Geography, University of Oulu, Finland; and Visiting Professor at University of Akureyri, Iceland.

His research fields include International Relations, Geopolitics, Security Studies, Environmental Politics, Political History, European Studies, Russian Studies and Northern / Arctic Studies.


**WILLIAM S. RICHARD**

*Brigadier General (retired); Senior Fellow, Queen’s Centre for International and Defence Policy; Adjunct Professor, School of Policy Studies, Queen’s University*

William (Bill) Richard is a retired Brigadier General from the Canadian Forces with extensive experience in strategic planning, leadership, information technology, program management, policy, and international affairs.

Bill is currently an Adjunct Professor in the School of Policy Studies and Senior Fellow in the Queen’s University Centre for International Relations. He is also the Executive Director of the Public Executive Program in the School of Business. Bill has been active promoting human capacity building in Nunavut Territory through extension of Queen’s University executive development, in partnership with government.

Prior to his retirement from the Canadian Forces, Bill was the Commander Canadian Defence Liaison Staff (London, UK), responsible to the Chief of Defence Staff and the Canadian High Commissioner for bilateral Defence Relations with the United Kingdom, requiring regular liaison...
at the top level of government. He has served as the Chief of Staff ADM Information Technology Group and Chief of Staff DCDS Group at National Defence Headquarters in Ottawa.

Throughout his military career, Bill has served in United States, Belgium, Germany, Israel, and Egypt and held several senior appointments in Ottawa, Kingston, London (UK) and at NATO Headquarters Brussels. While serving in London, UK, he was recognized for extensive support to Canadian WWII veterans living in England. He is also the recipient of the Kingston Chamber of Commerce President’s Award and Rotary Club Paul Harris Award for building community partnerships. He has a passion of concern for the health of our veterans, soldiers and their families. He is currently the Co-Chair of the Implementation Committee responsible for establishing the Canadian Institute for Military and Veteran Health Research.

Bill is a graduate of the University of Prince Edward Island, Clark University (MA), Queens University (MPA) and National Defence College.

**PETER SLAIBY**

*Vice President, Shell Alaska; Exploration & Appraisal*

Pete started his career with Shell in New Orleans in 1980 working in the Gulf of Mexico as a Petrophysical Field Engineer. He later moved into a Surveillance Engineering role in the Gulf of Mexico and completed his assignment in New Orleans, working in the Western Gulf and later on frontier development concepts in the Florida Gulf.

In 1984, Pete moved to the Shell Oil Company subsidiary Pecten International in Houston. He held international assignments in various development and production operational roles that took him to Syria as Project Engineer for the Thayyem Development. Pete traveled to Brazil as the Project Engineer for the Merluza Field topside work and completed the assignment as Engineering and Operations Manager for Pecten Brazil. In 1995, Pete moved to Douala Cameroon as Technical Manager for both the Pecten operated Mokoko Abana concession as well as numerous partner operated ventures in Cameroon. In 1999, he was assigned the role of Asset Manager for part of the Shell Expro Southern North Sea gas business in Lowestoft, Suffolk (UK), and in 2004, Pete assumed responsibility for one of Shell’s oldest business relationships as Brunei Asset Manager. In these roles he managed the life-cycle of the hydrocarbon production businesses, and most importantly, managed the facilities to the highest health, safety and environmental standards.

In May 2008, Pete was named General Manager of Shell’s Alaska business. In July 2009, Pete was promoted to Vice President of Shell Alaska Exploration and Appraisal. In this role, he manages Shell’s exploration and production activities in Alaska, including Shell’s continued efforts to develop relationships with a wide variety of stakeholders.

Pete grew up in Connecticut and attended Vanderbilt University in Nashville, Tennessee, where he received a BE in Mechanical Engineering. He met his wife, Rejani, during his assignment in Brazil. Pete and Rejani have a son, Teddy. He loves sports and family-oriented activities.
**PROFESSOR MARIANNE DOUGLAS**
*Director, Canadian Circumpolar Institute, and Professor, Earth and Atmospheric Sciences, University of Alberta*

Dr. Douglas has spent the past two decades conducting research on environmental change in the polar regions. A professor in the Department of Earth and Atmospheric Sciences at the University of Alberta, she is also the director of the Canadian Circumpolar Institute. Although the focus of her research has been in the Canadian Arctic Islands, she has completed a few field seasons in Antarctica. She and her research team use paleolimnological techniques (the study of lake sediments) to document the effects of accelerated warming in the Arctic as well as the impacts human activities are having on the environment. These data are used in environmental modelling, archaeological applications, in forecasting future environmental conditions and identifying potential environmental health risks associated with airborne pollution deposition.

Her university education was undertaken in the Biology Department at Queen’s University, followed by a research associate position at the University of Massachusetts, Amherst. Prior to joining the University of Alberta in September 2006, she spent 10 years as a professor in the Geology Department at the University of Toronto. She currently sits on a number of polar research and education boards and chairs the Canadian Committee for Antarctic Research.

**CAPTAIN(N) JAMES FISHER**
*Chief, Office of Emerging Policy, United States Coast Guard*

Captain J.J. Fisher is assigned as Chief, Office of Ocean and Operations Policy under the Assistant Commandant for Marine Safety, Security, and Stewardship, Coast Guard Headquarters, Washington, D.C. CAPT Fisher is responsible for enterprise-wide and external policy development, as well as coordination and review of interagency policy and plans. His office also serves as the Coast Guard point of contact to DHS’ Office of Policy. Additionally, his office is responsible for cross- directorate integration of Oceans policy and planning efforts and the coordination of Headquarters policy and planning staffs.

Captain Fisher is a native of Williamsport, Pennsylvania. He graduated from the U.S. Coast Guard Academy in New London, Connecticut in 1986 with a Bachelor of Science degree in Civil Engineering.

Following graduation from the Academy, he was assigned to USCGC DILIGENCE (WMEC 616) homeported in Port Canaveral, Florida where he served as a Deck Watch Officer and later as acting Operations Officer.
In June 1988, he reported aboard USCGC OCRACOKE (WPB 1307) homeported in Naval Station Roosevelt Roads, Puerto Rico as Executive Officer. While aboard, Captain Fisher was involved in one of the largest seizures of cocaine in U.S. history at the time, as well as recovery operations in the aftermath of Hurricane Hugo. Following his second afloat tour, he was assigned to the Eighth Coast Guard District Command Center in New Orleans, Louisiana where he served as a Controller and Senior Controller from 1990 until 1993.

In July 1993 he assumed command of USCGC DRUMMOND (WPB 1323) homeported in Port Canaveral, Florida. During his tour, DRUMMOND participated in Operations ABLE MANNER, ABLE VIGIL and UPHOLD DEMOCRACY, rescuing over 1500 Haitian and Cuban migrants. Following his command tour, he was assigned to the Office of Law Enforcement in the Seventh Coast Guard District in Miami, Florida. While there he served as the District Patrol Boat Manager and Chief of the International Operations Division where he played an integral role in getting the Coast Guard’s fledgling international engagement program off the ground.

In June 1998, Captain Fisher received orders to USCGC VIGILANT (WMEC 617) homeported in Port Canaveral, Florida where he served as Executive Officer from 1998 to 2000. In August of 2000, he was assigned as Chief, Planning and Budget Division in the Office of Cutter Forces (G-OCU) at Coast Guard Headquarters.

Captain Fisher assumed command of USCGC VIGILANT (WMEC 617) in August 2004. During his tour, he was involved in several narcotics seizures, the rescue and interdiction of over 1,500 illegal migrants, nearly fifty search & rescue cases and participated in several international counter drug operations. VIGILANT also earned the coveted Battle ‘E’ for operational readiness while under his command.

Captain Fisher reported to the Joint Staff, Strategic Plans and Policy Directorate, J-5 in July 2005 where he has served as a strategic planner. While assigned to the Joint Staff, Captain Fisher represented the Chairman of the Joint Chiefs of Staff on a variety of maritime defense and security issues, most notably Maritime Domain Awareness (MDA) initiatives.

Captain Fisher’s personal awards include the Defense Meritorious Service Medal, two Coast Guard Meritorious Service Medals, five Coast Guard Commendation Medals, two Coast Guard Achievement Medals, the Commandant’s Letter of Commendation, and numerous unit awards. He is married to the former Ms. Deanna J. Cometto of Huntington, WV and has two sons, Michael and Jacob.
THOMAS AXWORTHY

President and CEO, Walter & Duncan Gordon Foundation

Thomas S. Axworthy is a distinguished senior fellow at the Munk School of Global Affairs. He has served as Senior Policy Advisor and Principal Secretary to Prime Minister Pierre Trudeau. In 1984, Dr. Axworthy went to Harvard University as a Fellow of the Institute of Politics at the Kennedy School of Government. He was subsequently appointed visiting Mackenzie King Chair of Canadian Studies. In 1999, Dr. Axworthy helped to create the Historica Foundation to improve teaching and learning of Canadian history, becoming its Executive Director until 2005. To recognize his achievements in heritage education (he initiated the Heritage Minutes), civics, and citizenship, Dr. Axworthy was invested as an Officer of the Order of Canada (2002). In 2003, he became Chair of the Centre for the Study of Democracy, School of Policy Studies, Queen’s University, pursuing the themes of expanded human rights and responsibilities, democratic reform, Canadian-American relations, and modern liberalism that characterized his research, teaching and advocacy career. In 2009, he became President and CEO of the Walter & Duncan Gordon Foundation.

Dr. Axworthy has edited several publications, with the most recent being Bridging the Divide – papers for the Interaction Council, (June 2008). He was awarded an honorary LLD from Wilfrid Laurier University (2003) and the Public Affairs Association Award of Distinction on November 26th, 2008 by the Public Affairs Association of Canada.

PROFESSOR PETER J. V.C. DE GROOT

Associate Professor, Department of Biology, Queen’s University

Peter J. van Coeverden De Groot completed his Ph D. at Queen's University in 2001. For his thesis, he examined genetic variation in muskoxen throughout their Canadian and Greenland range. More recently he has been working on Polar Bear mating systems using genetics and is working on methods that can include local Inuit in data collection. He also uses genetics to answer rhino and elephant conservation questions in Africa and Asia. He and his family live on farm near Kingston.
Udloriak Hanson
Special Advisor to the President, Inuit Tapiriit Kanatami (ITK)

Udloriak Hanson is Special Advisor to Mary Simon, President of Inuit Tapiriit Kanatami (ITK), the national organization representing Inuit from Nunavut, Nunavik in Northern Quebec, Nunatsiavut in Labrador and the Inuvialuit region of the Northwest Territories.

From 2007 to 2010 she was Senior Policy Liaison at Nunavut Tunngavik Inc. (NTI), the land claims organization representing Nunavut Inuit, and she remains NTI’s Chief Negotiator on devolution.

From 2005 to 2007, she led the development of Nunavut’s Qaujisaqtiiq Society, the territory’s first consortium of Inuit non-profit organizations. She has also served as executive assistant to the Government of Nunavut’s Minister of Sustainable Development and as NTI’s Director of Business and Economic Development, where she negotiated multi-lateral agreements between NTI, the Government of Canada and the Government of Nunavut and assisted in the development of Nunavut’s first Economic Development Strategy.

Ms. Hanson has significant experience representing Inuit interests with regard to policy development. She has facilitated workshops for the Arctic Council’s Permanent Participants, and has authored and co-authored articles on Arctic governance and Inuit, including an article on the implementation of the Nunavut Land Claims Agreement in the forthcoming issue of the Arctic Review on Law and Politics.

She is a member of the Board of Directors for ArcticNet, a Laval University-based Network of Centres of Excellence of Canada, and Arctic Peoples and Security co-chair for the Munk-Gordon Arctic Security Program, a four-year multi-dimensional international program to improve public policy in the Circumpolar Arctic.

She previously served as a member of the steering committee of the Arctic Governance Project, an alliance of indigenous leaders, researchers and policy workers to frame the critical issues of governance in the Arctic and devise innovative responses for a sustainable future.

Ms. Hanson is an Inuk born and raised in Iqaluit, Nunavut. She has undergraduate degrees in business administration and education and is a frequent guest speaker, nationally and internationally, on issues affecting Inuit across Canada.
**Andrea Charron, Ph.D**  
*Carleton University; War Studies, Royal Military College of Canada*

Andrea Charron was the SSHRC postdoctoral fellow at the Norman Paterson School of International Affairs at Carleton University. Her areas of research include UN sanctions (her book on UN sanctions is due out this summer with Routledge), Article 41 tools, and Canadian foreign and defence policy - especially concerning the Arctic. She holds a PhD from the Royal Military College of Canada (Department of War Studies), an MA in International Relations from Webster University, Leiden, The Netherlands, a MPA from Dalhousie University, and a BSc (Honours) from Queen’s University. Dr. Charron worked for various federal departments including the Privy Council Office (Security and Intelligence Secretariat) as a policy analyst.

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**Professor Douglas Lovelace**  
*Director of the Strategic Studies Institute, US Army War College*

Douglas C. Lovelace, Jr., became the Director of the Strategic Studies Institute in May 2000. He held the Douglas MacArthur Professor of Research Chair at the U.S. Army War College. His Army career included a combat tour in Vietnam and a number of command and staff assignments. While serving in the Plans, Concepts and Assessments Division and the Conventional War Plans Division of the Joint Staff, he collaborated in the development of documents such as the National Military Strategy, the Joint Strategic Capabilities Plan, the Joint Military Net Assessment, national security directives, and presidential decision directives. He also was Director of Military Requirements and Capabilities Management at the U.S. Army War College. He is a graduate of the U.S. Army Command and General Staff College and the National War College. He holds an MBA from Embry Riddle Aeronautical University and a J.D. from Widener University School of Law. He is a member of the Pennsylvania and New Jersey bars. He has published extensively in the areas of national security and military strategy formulation, future military requirements and strategic planning.
There are three features of special interest in the St. Lawrence – the Thousand Islands, the Rapids, and the highlands of the north shore from Quebec down. The first are the perfection of beauty, the second are almost terrible in their strength, and the last are stern and grand, rising at times to the sublime.

The Lake of the Thousand Islands begins immediately below Kingston, and stretches down the river for forty or fifty miles, varying from six to twelve miles in width. This area is profusely strewn with islands of all sizes from the little rock giving precarious foothold to a stunted juniper or a few wild flowers, to the large island, stretching in broad farms and waving with tall and stately forests. Instead of a thousand, there are in all some eighteen hundred of these lovely isles and one man-made one. The islands were formed in the last ice age, more than 10,000 years ago. Retreating glaciers carved out a rocky mountain range, the peaks of which became islands when the St. Lawrence flooded the region.

Aboriginals call the area Manitouna, or “Garden of the Great Spirit,” and explain its creation with the following legend.

“Two powerful gods, one good and one evil, were arguing over who would rule the St. Lawrence River. They hurled handfuls of rocks, torn from the earth’s surface, across the river at each other. Many of the rocks fell short of the banks and landed in the river. The good god won the battle, and evil spirits were banished. Enchanted spells allowed forests to flourish on the rocks which had fallen in the river. These forested rocks became the thousand islands.”

Archaeological evidence traces Aboriginal presence in the area back 7,000 years. Many Iroquois tribes favoured the islands as summer camping grounds before the Europeans arrived. Between 700 BC and 1600 AD, they served as a base for fishing camps in the summers and fall hunting excursions.

European discovery of the St. Lawrence River is claimed by Jacques Cartier, who came upon it in August 1535. It quickly became an important transportation route for explorers, trappers, traders, soldiers, and missionaries seeking access to the Canadian interior and the United States.

Arriving in the 1600s, Samuel de Champlain was the first European explorer to come upon the islands. By the late 1700s, European settlement of the islands had begun. A boundary
agreement between Canada and the United States ensures that no island is split between countries. While two thirds of the islands fall in Canadian territory, the total acreage of Canadian and American islands is roughly equal. Most of the islands are now privately owned, but the region is also home to a UNESCO biosphere reserve and the St. Lawrence Islands National Park. Thousands of tourists enjoy the Thousand Islands region each year!

The construction of canals around the river’s rapids has made it entirely navigable, though ice can obstruct passage during the winter months. The river, nearly 750 miles long, comprises a significant part of the St. Lawrence Seaway. Opened in 1959, the St. Lawrence Seaway is an international waterway of canals, locks, and dams in the St. Lawrence River and connecting channels between the Great Lakes. It stretches almost 2,350 miles in length, allowing large ocean-going vessels access to central North America. Today it also serves as an important source of hydroelectric power.

With the exception of the Amazon at its flood, the St. Lawrence is the largest river in the world. Its basin contains more than half of all the fresh water on the planet. At its issue from Lake Ontario it is two and a half miles wide, and is seldom less than two miles. At its mouth it is upward of thirty miles wide, and at Cape Gaspe the Gulf is nearly a hundred miles wide.