
Good morning, ladies and gentlemen. It’s a pleasure to be here to deliver the opening keynote address at this conference on behalf of the navy’s Deputy Commander, RAdm Paul Maddison. Adm Maddison very much regrets that other commitments precluded him from being here, as he was genuinely privileged to have been offered the opportunity by the Army to discuss issues that are of abiding importance to Canada and hence to the Canadian Forces as a whole. He has asked me to pass to you his best wishes for a successful and truly useful gathering.

Admiral Maddison is aware that I am a rare beast among serving senior officers in Canada’s navy: a sailor who deployed to Canada’s High North in my formative years, an experience that left upon me an indelible mark as a mariner and a passion for the region, which I hope today to impart to your deliberations.

A story about Pond Inlet

A Unique Maritime Theatre

If the two oceans that lie to the east and west of us have shaped Canada’s history, then our third ocean—the one that serves as the theme of this conference—will shape our future profoundly.
There’s no doubt that the Arctic already plays a major role in Canadians’ national psyche and sense of identity. “The true north strong and free” resonates as much for Canadians when they sing their national anthem, as do the words “the rockets red glare” for Americans. And yet, few Canadians have directly witnessed the High North’s abiding beauty, or experienced its harsh tyrannies and extremes of climate, remoteness and austerity.

The Arctic Archipelago is one of the world’s largest, and it’s a very long way from anywhere. The Northwest Passage, for example, is further from the homes of our east and west coast fleets in Halifax and Victoria, than are London and Tokyo respectively.

Fundamentally, the Arctic is a maritime theatre. I do not say this in a parochial naval sense but rather as an inescapable conclusion of physical and social geography. There is not now, nor is there likely to be, an explosion of road and rail connections to drive forward and sustain development of the High North, as was the case in the 19th and 20th centuries with the great western movement of settlers into the west of North America.

Northern communities, as they develop, will be connected to the south largely by air and sea. They will be supplied and sustained by ship, rarely by rail, and in the west increasingly less by ice roads across the frozen landscape.

Canada’s High North is an ocean space, a vast archipelago enveloped in an oceanic icefield that both defines and dominates the environment. But unlike any other ocean space in the world, it is virtually inaccessible but for a short season in the late summer and early fall. Even then, the sea ice within the
Arctic Archipelago becomes at best partially navigable by vessels that are specially designed to operate within it.

For much of the remainder of the year, winter retains the High North in an icy grip. Out of this vast oceanic icefield, Greenlandic icebergs are projected southwards in the east by the Labrador current to the Grand Banks and Newfoundland into an area roughly half the size of Europe. Nowhere else on earth, with the exception of Antarctica, is it more austere to operate or less forgiving to the unprepared than in our own high North.

Despite its surreal and almost alien beauty—the Arctic brooks no mistake, leaves little margin for error and so demands exceptional forethought and planning in order to work and survive there. In short, the Arctic is still in charge and will be for decades to come.

For the Canadian Forces to operate there persistently, effectively and safely in support of the national interest—and here I refer to the High Arctic of the Archipelago and not the low Arctic that is bounded at the ice-edge—our requirements, competencies and practices will be shaped profoundly by three tyrannies: the tyranny of distance; the tyranny of climate; and the tyranny of austerity. I will return to this crucial point a little later to describe how these realities will impact upon the design of an Arctic Offshore Patrol Ship.

There is a second and perhaps more profound reason that the Arctic is a maritime theatre. That is because the central issues of the region hinge upon matters of international maritime law, as I examine next.
A Parable of Change for this 21st Century

Just as all lines of longitude meet at the North Pole, many of the trends and drivers reshaping the global defence and security environment are converging in the Arctic, compelling us northwards.

In fact, we are likely to see more change in the Arctic in the coming two to three decades than since Europeans first established a foothold in Greenland.

Indeed, strategic consideration of the region is being propelled into the foreground, bringing the five coastal states that encircle the Arctic Ocean and the eight nations stretching north beyond the Arctic Circle towards the center of world affairs.

Predictions may vary, but all of the analyses of which I am aware suggest that climate change will open Arctic waters as a commercially viable sea-route between Europe and Asia for the first time in recorded history, with recent trends suggesting that eventuality could arrive much sooner than many thought possible even a few years ago. In all likelihood, the Northern Sea Route will emerge across the Arctic Basin via Russia’s northern waters well before the fabled Northwest Passage of Canada. And such are the advantages for ‘transit’ shipping of this long-sought passage across the Arctic Ocean that shipping patterns world-wide are likely to be altered significantly, with consequences that will be felt not only in the northern hemisphere but even on the other side of the equator.

In conjunction with climate change and a changing ice regime, an increasingly imbalanced energy supply versus demand equation, and improvements in petroleum extraction technologies, will make Arctic seabed
and island resources commercially exploitable, again potentially much sooner than many had previously envisaged, with prospects of greatly increased ‘destination’ shipping going in and out of the Arctic rather than through it.

And the economic stakes are enormous. Believed to be awaiting each of the five Arctic coastal states in their offshore estates are precious inheritances for decades to come—vast energy and mineral reserves that have been already discovered, or are believed to lie, in the Arctic Basin and its periphery.

All of this will eventually bring new and unprecedented levels of human activity in the high North, including not only a host of economic opportunities in northern societies, but also accelerating social change as traditional lifestyles are progressively altered, as well as greater risks to the environment even as global warming continues to alter exquisitely sensitive Arctic ecosystems.

As a recent boundary delineation agreement between Russia and Norway attests, we have every confidence that competition for resources in the Arctic will be moderated by cooperation and disputes reconciled by law.

Indeed, many defence analysts as a result do not envisage a conventional military threat in the Arctic for the foreseeable future. Nonetheless, the prospects of greatly increased economic activity will bring with them increased risks of marine incident and environmental accident from both transit and destination shipping, while affording to others the opportunity to mask their criminal or terrorist undertakings at sea or ashore.
Accordingly, there are ample reasons already for the Canadian Forces to hasten the delivery of sea, land and air capabilities that will permit us:

- To meet our responsibilities and obligations as a coastal state in the Arctic;
- To reinforce our capacity to regulate our offshore estate as required and permitted by international law;
- To support the work of other government departments that have a regulatory or law-enforcement mandate; and
- To provide a capacity to respond to events in the High Arctic.

In short, we must be able to do in high Arctic latitudes what we are required to do in southern latitudes—nothing more, nothing less.

What this translates to, in terms of force capabilities, I will return to in moment. But it is worth exploring a little further what the Arctic may tell us more broadly about the global maritime domain.

**The intensification of Ocean Politics**

The environment, economic and legal pressures which the members of the Arctic Council are addressing through consultation and cooperation are been met elsewhere by significant increases in inter-state tension and confrontation.

In the last year alone, for example, we witnessed the world’s 2nd and 3rd largest national economies become embroiled in a bitter dispute over a small group of islands in the East China Sea—a dispute that began in relatively
minor circumstances in the arrest by Japan of a Chinese fishing trawler but that escalated rapidly into a major diplomatic standoff until Japan eventually yielded to Chinese demands. Analysts have suggested that China in effect leveraged its dominant position in the global production of rare earth metals and oxides to place entire sectors of the Japanese economy at risk, and reports of proposed sharp reductions in Chinese export quotas did emerge in the media at the time. That is neither here nor there. But both countries behaved in a manner which underscored that issues of international maritime law are core national interests to each of them.

This dispute, as well as dozens of others this audience could cite, points to the fact that ocean politics are intensifying around the world, the result of a global coupling of the same trends and drivers that have propelled the Arctic into the headlines. These factors include:

• Steadily increasing global demands for strategic resources including energy and food;

• The existential need for the advanced economies to secure assured access to those resources; and

• The role of climate change, which is serving as a catalyst for a host of other social dislocations brought upon by globalization, population growth and other factors.

Such trends will make for a future maritime domain of great strategic complexity and competition, but they also threaten to alter the legal and political foundations upon which the current global maritime order is built.
This has happened at least twice before and precisely when two conditions we observe in today’s global system aligned themselves in the past: a fundamental reordering of international society itself, coupled with an extensive reconstruction of global power:

- The first such instance occurred in the 17th century, when the Dutch and the English went to war on three occasions to determine how the world’s oceans would be regulated. Ironically, although the English eventually emerged from that nearly century-long struggle as the dominant maritime power, it was the Dutch legal tradition of *mare liberum* (maré li be room) or freedom of the seas, that gained ascendancy, precisely because it was better matched to England’s growing mercantile interests and then-nascent global aspirations than the *mare clausum* doctrine that England defended before she became a naval and mercantile power;

- The second such instance occurred in the latter half of the 20th century, when the retreat of European colonialism created a host of new coastal states whose maritime interests could readily have come into conflict with those of the traditional maritime powers, but for one remarkable fact: the international community chose to reconcile the two sets of interests through consultation and cooperation, rather than through bloodshed, because no one then saw it as in their interests to endure instability in the maritime domain. The result was arguably the most successful international treaty ever conceived: the 1982 United Nations Convention on the Law of the Sea, or UNCLOS, which effectively permitted the world’s coastal states to ‘enclose’ a vast majority of the world’s ocean resources, but without prejudice to the traditional freedoms of navigation that were of crucial interest to the maritime powers.
It remains to be seen whether or not the international consensus that lies behind UNCLOS will continue to hold in the coming decades, in the face of what may become existential pressures upon many states both large and small. But there are few questions of greater importance in these opening decades of the 21st century, and especially for a country such as Canada, which has benefitted more than most from UNCLOS, both as a coastal state and a trading nation.

Accordingly, how Canada and her Arctic Council partners approach the resolution of Arctic issues has strategic consequences that will echo far beyond the Arctic itself, and for decades to come. I would contend, however, that we must to cooperate in the Arctic, and not simply because it’s the right thing to do. We must find ways to cooperate there in ways that reinforce the legal foundations of the international system. Our future security and prosperity depend upon it.

The attention that is drawn to disagreements, for example regarding the status of the Northwest Passage, is in my view misplaced. This is one area where the US and Canada have agreed to disagree. But with the public focused on such issues, insufficient attention is paid to the extensive international cooperation that does take place.

Canada’s relations with our Northern neighbours are actually very positive. From an institutional perspective, many northern issues are systematically being addressed through the Arctic Council, as attested by the Search and Rescue Treaty recent concluded by the member states at this forum.
Canada is cooperating on the scientific work required to delineate the extent of our continental shelf with the US and Denmark, and it contributes to similar multi-national efforts with Russia and Norway as well. Again, there is nothing ironic about this. It serves the collective interest to see such claims regulated within the existing framework of the Law of the Sea.

The Canadian Coast Guard transports supplies to the US base at Thule, Greenland, and the joint Canada-US NORAD is responsible for continental aerospace control and maritime warning. The recognized maritime picture including its Arctic component is built from information shared by Canada, the US, Denmark and other NATO sources for instance.

Direct military cooperation is also evident in how our operations are evolving. For example, the US and Denmark participated last summer in the military Exercise NASIQ, as part of Operation NANOOK, in the Davis Strait-Baffin Bay area. Just this spring the Canadian Forces personnel participated in ICEX 11 with the US Navy in the Beaufort Sea.

Finally, Nuuk Greenland is a welcome port for any ships in the north, a port where Canadian warships regularly fuel and resupply before heading further north.

**Our Role in Canada’s High North**

And with mention of Operation NANOOK, permit me to now to discuss the role of the Canadian Forces in the High North.

At the most fundamental level, the role of Canada’s maritime forces—and here I am acknowledging the significant contributions made by Canada’s Air Force towards maritime security—is to assist other elements of the federal
family to regulate our ocean approaches. This is what we do today, and have always done, in the Atlantic and Pacific approaches to Canada.

The Arctic will be no different—our role will not change in northern latitudes—but what works very well in the Atlantic and Pacific must be adapted to a far more challenging theatre, including a recognition that effective stewardship of the Arctic must be achieved through the cultivation of productive partnerships at all levels of government and with the peoples of the North. This, in effect, is what Op NANOOK is all about.

**Military Initiatives**

The Canadian Forces already maintains a number of assets in the North, but the *Canada First* Defence Strategy identified five initiatives that will begin to enhance our needs for greater maritime domain awareness and presence in the region:

- First is the acquisition for the navy of six to eight Arctic/Offshore Patrol Ships.
- Second is the establishment at Nanisivik on Baffin Island of an Naval Berthing and Refuelling Facility.
- Third is the establishment of the Canadian Forces Arctic Training Centre in Resolute Bay to facilitate training in this uniquely challenging climate.
- Fourth, is the integration of RADARSAT II satellite information into our wide-area national surveillance picture.
And finally, the Canadian Rangers—“eyes and ears” on the land—will expanded to improve their ability to provide presence and surveillance in northern coastal regions.

I mentioned earlier that the Arctic operating environment—and specifically its extremes of climate, remoteness and austerity—will exert a major influence on requirements. The Arctic/Offshore Patrol Vessel, or AOPS, is a case in point.

AOPS WILL NOT BE A COMPLEX COMBATANT. It will be armed and equipped for a constabulary role in support of other government departments—a role, however, that will require it to operate effectively, safely and reliably within the Arctic Archipelago during the navigable season, and not merely in the low Arctic, as well as in Canada’s other two oceans at other times of the year:

As a result, the ship will exhibit a number of the key characteristics of an icebreaker in terms of hull form, displacement, power and robustness of propulsion and so on. But there will be compromises in order to ensure the vessel’s ocean-going stability required in northern Atlantic and Pacific waters when they are deployed to the north.

Second, it will most often operate alone, likely the only government vessel within days or more of being able to respond to events. It cannot become a liability through equipment casualty. That translates into a great deal of redundancy for mission-critical systems, as well as to avoid becoming trapped in the icefield by equipment failure, especially when the closest assistance may be many weeks or indeed months away.
• Third, this is a vessel that is for all intents and purposes will be deployed at expeditionary distances from the south. It must have the endurance to travel several thousand kilometres to deploy to the theatre of operations, operate a great distances from its forward staging base at Nanisivik for extended durations and return home on completion of a northern patrol.

• Fourth, it is a vessel that must have inherent utility for boat operations, helicopter support operations, and have capacity to carry special teams such as boarding parties, army personnel, or divers for instance, and be capable of communications, command and control to support contingency operations in the north.

Concluding Remarks

The Arctic long ago captured the hearts of Canadians. It must now occupy our minds, as well as our pocket-books, as we grapple with addressing the consequences of dramatic change that are begin to unfold in our High North—consequences that are beginning to emerge along every human axis: social, cultural, technological and political.

It is a truly strategic decision to not just look north, but to go there—but go there we most assuredly will. The Canadian Forces will be an integral and significant part of Canada’s move to safeguard our precious national inheritance and fulfill our responsibilities as both a coastal state, an Arctic nation, and circumpolar partner.

Thank you.
The Changing Arctic
Sovereignty, Resources and Security

Commodore John Newton
Canadian Navy
Director General Naval Personnel
and
Commander Maritime Training System
CREATURE FROM THE BLACK LAGOON

CLAWING MONSTER FROM A LOST AGE strikes from the Amazon's forbidden depths!

Starring

RICHARD CARLSON・JULIA ADAMS

RICHARD DENNING・ANTONIO MORENO

Directed by J ack Arnold; screenplay by HARRY ESSEX and ARTHUR ROSS; produced by WILLIAM ALLAND.

A UNIVERSAL INTERNATIONAL PICTURE.