

# PRESENTATION NOTES

## STEPS TOWARD AN ARCTIC NUCLEAR WEAPON FREE ZONE

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Let me thank John Avery and the Danish National Pugwash Group for inviting me here today. Also I want to thank Michael and Adele for their excellent presentations and also Michael Wallace, who could not join us here today, for his input on these remarks.

Well, I don't know what more I can add to such thorough discussions – maybe a story, some dreary numbers and a few good ideas (mostly belonging to other people).

First the story.

On February 18th of this year, two Russian long-range strategic bombers, Tupelov 95Ms, also known as Bears, took off from Engels Airforce Base in Saratov Region, in the Russian Federation. The base is in the southwest of the country, and these long-range planes are intended to carry nuclear bombs and air-launched nuclear-tipped cruise missiles.

The training flight, likely unarmed, flew over the Arctic to the Beaufort Sea, where, according to an official of the Russian Federation Embassy in Ottawa, the planes came to within 200 kilometres of the Alaska/Yukon border – the Yukon being a Canadian Territory. Then they turned back home homewards.

Nine days later Canada's Defence Minister, Peter MacKay, held a press conference with the Chief of Defence Staff and the U.S. head of NORAD, to announce that the flight had occurred and a Canadian CF-18 Hornet had been scrambled to meet the Russian aircraft and force them to turn back. He strongly reprimanded the Russians for the flight. He pointed out that the incident occurred a day before U.S. President Barack Obama was to visit Ottawa.

The Prime Minister went further. Stephen Harper said, "I have expressed at various times the deep concern our government has with increasingly aggressive Russian actions around the globe and Russian intrusions into our airspace."  
(cbc.ca February 27, 2009)

The tough talk from the Canadian government conjured up the Cold War. But the sabre-rattling became somewhat embarrassing when it was clear that the Russian aircraft did not enter Canadian airspace at all.

Canadian military officials downplayed the incident, declaring it routine. Russia launched its own counterspin, declared the Canadian protests “a farce,” and dispatched officials to explain that there was no violation of Canadian sovereignty since the flight occurred in international airspace, and that NATO forces regularly make these flights toward Russian territory.

Even the U.S. commander of NORAD, General Gene Renuart, was unmoved by the purported Russian threat, saying: "The Russians have conducted themselves professionally; they have maintained compliance with the international rules of airspace sovereignty and have not entered the internal airspace of either of the countries."

But the incendiary talk illustrates what some have called Bear-baiting and Russophobia. Canada’s former ambassador to Russia and former UN ambassador for disarmament Chris Westdahl says Canada “should stop picking fights where none need be, with Russia.”

But Bear-baiting is good politics in Canada these days, as the government asserts Canadian sovereignty in the Arctic, and tries to defend its claim that the Canadian Arctic is not an archipelago of islands, and therefore the Northwest Passage is an internal waterway, not an international one.

Canada is becoming more aggressive, trying to brand itself as an Arctic Power. In fact, reporters have noticed increased use of the phrase “Arctic Power” in government communications.

Canada’s Foreign Affairs Minister has said that “Canada will not be bullied,” and met with Russia’s Foreign Minister to request that Canada receive advance notice of future training missions.

The issue of advance notice of flights was raised in Parliament, as MPs questioned a Russian embassy official on the process. Canadian government officials claimed they had no advance notice, but the Russian official said that notice was given to the United States under the terms of the 1991 START agreement. START I expires on December 5<sup>th</sup> of this year.

Why Canadians did not know, given that we are partners in NORAD with the U.S., raises as many questions about information sharing with the Americans as with the Russians, in my view.

Testifying before the U.S. House Armed Services Committee, the Commander of U.S. Northern Command and NORAD said that in 2008, pairs of Russian TU-95 Bear-H aircraft flew into NORAD’s Air Defense Identification Zone on seven separate occasions. All but one of these flights were unannounced, and foreign planes never violated North American airspace.

On another occasion, General Renuart told a Canadian audience that “from the end of the Cold War to 2006, there were 10 or 11 or 12 Russian patrols up in the Arctic region. Since 2007, there have been a total of 30.”

The February aircraft incident, which evoked such a strong reaction from the Canadian government, stands in stark contrast to another incident involving nuclear forces and Canadian sovereignty.

Last August, a year ago, the Canadian Forces quietly scrambled to investigate a report of a foreign submarine sighting near the eastern entrance of the Northwest Passage. The sub sighting – what the military described as a reliable report from hunters – occurred near the northern end of Baffin Island on August 9, 2008.

The sighting was linked to a report a few days earlier of a mysterious explosion in the area, widely reported in the media. Another group of hunters heard the explosion, which was so large it shook their cabin. They emerged and saw a plume of black smoke some distance away.

But in the case of the explosion and sub sighting, the military commented only on the explosion, and rewrote planned responses to journalists, removing any reference to the submarine.

The difference in reactions, on the one hand bellicose pronouncements regarding a Russian training flight, on the other attempts to hide from the media the fact that a sub was sighted near the entrance of the Northwest Passage, is remarkable.

It is possibly due to the fact that bomber flights are clearly visible using radar and Canada has the ability to scramble fighters and meet the Russian aircraft. But we have no way of identifying or monitoring submarines, nor can we intercept them.

In fact, the sub could have belonged to one of our allies.

The government also wanted to avoid a repeat of the awkward visit of a U.S. nuclear attack submarine to the Arctic around the time of the Canadian federal election in 2005. The then Liberal government was embarrassed when it was revealed that the *USS Charlotte* had spent two weeks under the Arctic ice pack, surfaced at the North Pole, and possibly crossed into Canadian territorial waters.

When contacted at the time, a U.S. embassy spokesperson simply said the submarine did not need Canada’s permission to travel through international waterways. The problem is that the U.S. does not recognize Canadian sovereignty claims beyond 12 nautical miles from the coast, and considers the Northwest Passage international waters.

In order to monitor traffic, the Canadian government has tried to build an underwater network of listening devices to track submarines along the eastern part of the Northwest Passage. An attempt in the 1990s fell apart because of a a hundred-million-dollar price tag. A second attempt, launched in 2007 by the current government to fulfill an election promise emanating from the *USS Charlotte* incident, has also been delayed. Listening devices and land-based sensors on Devon Island were installed in 2008 as part of the Northern Watch program. But reports published last month say that the program is in hiatus as scientists review the data collected.

Now come the dreary numbers.

During the Cold War, Russian and United States nuclear submarines played cat and mouse games in the Arctic waters, under the ice. The airspace above the Arctic was the transit route for the nuclear-armed bombers.

While NORAD has taken the Russian Arctic flights in stride, and the Canadian government has used them for political hyperbole, we shouldn't kid ourselves about what these pilots are actually training to do – that is, to launch a nuclear attack.

Russia maintains a fleet of 77 strategic bombers, including 14 TU-160 Blackjacks, supersonic bombers first deployed in 1987 and similar in design to the U.S. B-1 bomber. The remainder of the fleet consists of 63 propeller-powered Tu-95 Bears, introduced in 1984.

According to Robert Norris and Hans Kristensen, writing in the *Bulletin of the Atomic Scientists*, Russia deploys 856 nuclear weapons on these aircraft in the form of air-dropped bombs and cruise missiles, representing about a third of Russia's Strategic Offensive Forces. The aircraft have stepped up operations outside and inside Russian airspace during the past year, and have held long-range exercises in the North Atlantic and North Pacific.

Just like aircraft, where you have fighter planes and bombers, so there are attack submarines and large-missile submarines. In the Arctic only nuclear-powered submarines can stay submerged long enough to operate. The United States, Russia, Britain and France have nuclear-powered attack and missile submarines that can patrol in the Arctic.

According to Norris and Kristensen, Russia maintains a fleet of ten missile submarines, six Delta IVs and four Delta IIIs, which are equipped with 160 submarine-launched ballistic missiles, carrying 576 nuclear warheads. The Russian navy is modernizing the Delta IVs to carry a new missile, and has a new class of missile submarine, the Borey class, in development. Although delayed, when completed the submarines will carry the new Bulova nuclear-armed submarine-launched ballistic missile.

Today, Russian submarines carry only 20 per cent of the country's nearly 2,800 strategic warheads (nearly half the total number of warheads are on land-based intercontinental ballistic missiles, and the rest are on the bombers). But Norris and Kristensen predict that by 2020, even though the total number of warheads will drop to 1,954, the percentage deployed on missile submarines will more than double, to 45 per cent.

Submarine patrols have increased in recent years. Russian ballistic missile submarine patrols have increased from 3 in 2007 to 10 in 2008, though this is far less than the dozens of patrols conducted in the 1980s.

Unlike the Russians' focus on land-based nuclear weapons, the United States has taken submarines as the platform of choice. The U.S. operates a fleet of 14 Ohio-class Trident missile submarines that carry an estimated 1,152 warheads, or 43 per cent of the operational U.S. arsenal, according to Norris and Kristensen.

Using documents obtained through the Access to Information Act, Kristensen found that the U.S. continues to operate its nuclear-armed submarines at rates similar to Cold War levels, and conducts more submarine patrol missions than the rest of the world combined. In 2008, Ohio class subs conducted 31 patrols, most of them from the west coast base at Bangor, Washington. The average patrol lasts 72 days submerged, and some missions have gone past 100 days.

As for the British and French, they too have come to rely on the submarine fleets to deploy their respective nuclear arsenals. Britain withdrew its last air-dropped nuclear bomb in 1998, and since then has a fleet of four Trident nuclear missile submarines, with one on patrol at all times. The fleet is closely integrated with the U.S. fleet, combining its D-5 nuclear missiles and approximately 200 warheads with the U.S. stockpile. The French fleet of three nuclear missile submarines, the fourth nearly completed, carries 240 of the country's 300 nuclear warheads.

All four of these countries can operate missile submarines in the Arctic. Although patrol routes are the most closely held secrets of the nuclear submarine powers, it's certain that the American and Russian nuclear-armed submarines are patrolling in the Arctic.

The fact is, the Arctic is becoming an zone of increased military competition. Russian President Medvedev has announced the creation of a special military force to defend Arctic claims. Russian General Vladimir Shamanov declared that Russian troops would step up training for Arctic combat, and that Russia's submarine fleet would increase its "operational radius." This week, two Russian attack submarines were spotted off the U.S. east coast for the first time in 15 years.

In January, on the eve of Obama's inauguration, President Bush issued a National Security Presidential Directive on Arctic Regional Policy. As Michael Hamel-Greene has pointed out, it affirmed as a priority to preserve U.S. military vessel and aircraft mobility and transit throughout the Arctic, including the Northwest Passage, and foresaw greater capabilities to protect U.S. borders in the Arctic.

The Bush administration's disastrous eight years in office, particularly its decision to withdraw from the ABM treaty and deploy missile defence interceptors and a radar in Eastern Europe, has greatly contributed to the instability we are seeing today. The Arctic has figured in this renewed interest in Cold War weapons systems, particularly the upgrading of the Thule Ballistic Missile Early Warning System radar for ballistic missile defence.

The Canadian government, as well, has put forward new military capabilities to protect Canadian sovereignty claims in the Arctic, including proposed ice-capable ships, a northern military training base and a deep water port.

Denmark last week released an all-party defence position paper that suggests the country should create a dedicated Arctic military contingent that draws on army, navy and air force assets with ship-based helicopters able to drop troops anywhere. Danish fighter planes could be patrolling Greenlandic airspace.

Last year, Norway chose to buy 48 Lockheed F-35 fighter jets, partly because of their suitability for Arctic patrols. In March, that country held a major Arctic military practice involving 7,000 soldiers from 13 countries in which a fictional country called Northland seized offshore oil rigs.

The manoeuvres prompted a protest from Russia – which objected again in June after Sweden held its largest northern military exercise since the end of the Second World War. About 12,000 troops, 50 aircraft and several warships were involved.

Jayantha Dhanapala, President of Pugwash and former UN Under-Secretary for Disarmament Affairs, summarizes the situation bluntly. He warns us that "From those in the international peace and security sector, deep concerns are being expressed over the fact that two nuclear weapon states – the United States and the Russian Federation, which together own 95 per cent of the nuclear weapons in the world – converge on the Arctic and have competing claims. These claims, together with those of other allied NATO countries – Canada, Denmark, Iceland, and Norway – could, if unresolved, lead to conflict escalating into the threat or use of nuclear weapons."

OK. Now come some good ideas.

The Canadian Pugwash Group issued a call in 2007 for an Arctic Nuclear Weapon Free Zone, which has been distributed and commented upon widely. While nuclear weapons are not the only threat to peace in the region, they are the most potent.

The proposal has served to spark the imagination of many people concerned about the militarization, or re-militarization, of the Arctic, and increased U.S.-Russian tensions. But it is also not without critics, as any serious proposal will be. The discussion it has provoked is welcome.

As my fellow Canadian Pugwash Executive member Michael Wallace has acknowledged, there are two main facts on the ground that make an Arctic Nuclear Weapon Free Zone impossible without additional, complementary disarmament measures. The first is that the two largest nuclear powers regularly deploy nuclear-capable submarines in the Arctic waters, and the second is that the largest and most important naval base for Russian ballistic missile submarines, Zapadnaya Litsa, is located on the Kola Peninsula north of the Arctic Circle.

As others have pointed out, all of the world's regional zones have prevented the acquisition of nuclear weapons by Non Nuclear-Weapons States and deployment of other states' nuclear weapons on their territory (the latter is permitted under the NPT, so long as the weapons are under the control of a Nuclear Weapons State).

Also, the transit of nuclear weapons, such as aboard submarines, are generally permitted in agreements.

Nuclear Weapons States that have signed the agreements pledge not to use or threaten to use nuclear weapons against countries in their respective zones. These are called negative security assurances.

So, as we can see an Arctic Nuclear Weapon Free Zone would be unique. It would be the first agreement to encompass the territory of nuclear weapons states, namely Russia and the USA. It would potentially require the de-nuclearization of the zone, rather than just preventing future actions. The zone would not cover entire states, but only regions of states. And, the negative security assurances required of the two nuclear weapons states would be especially problematic.

Nevertheless, as Michael Hamel-Greene reminds us, we should not quit before we even start. "In the case of all of the successfully established zones, there were critics and pessimists who suggested such zones would never be agreed on," he writes.

Many people have suggested some small steps that could be pursued as we move toward the larger goal.

Michael Wallace suggests Canada could consider declaring the Northwest Passage a nuclear weapon free zone. Since surface military ships and attack submarines of both the Russian and the American navies most certainly no longer carry nuclear weapons, and the shoals of the passage make it hazardous for submarine navigation, such a declaration would be a powerful, symbolic statement.

In order to acknowledge Russian concerns over such a zone's biased impact, a comprehensive set of nuclear disarmament measures could be put in place to "balance" the Russian strategic disadvantage. For instance, a follow-on treaty reducing weapons to 500 for each side could allow Russia to rely on land-based missiles, rather than submarine-based.

Adele Buckley, also a Canadian Pugwash Executive member, has suggested that all Arctic states presently non-nuclear agree to work together on a regional treaty, as allowed for in the Nuclear Non-Proliferation Treaty, to "assure the total absence of nuclear weapons from their respective territories." This would include Canada, Denmark, Norway, Sweden and Finland.

The Parliamentary Network for Nuclear Disarmament agrees, and suggests adding a protocol whereby nuclear weapons states would agree not to deploy, threaten or use nuclear weapons in the entire Arctic zone.

Jozef Goldblat suggests that the difficult circumstances of the region, given the proximity of two nuclear powers, could build on the experience of other Nuclear Weapon-Free Zones: "However, certain new approaches would be needed to deal with the existing situation." He suggests that "one could start by formally declaring the entire Arctic area a common legacy of mankind... The interest in creating a new regime in the Arctic would increase, if the denuclearization efforts were made in parallel, as well as in conjunction, with the scientific investigations related to climate change."

We also cannot overlook the existing bodies and treaties that could be used to promote security and co-operation.

Christopher Westdal recently asked why we are not making the most of the NATO-Russia Council. For instance, "Why aren't we promoting joint Arctic-security patrols flying wing to wing with those ancient Russian Tupelovs to prove the security of the northern Polar airspace, say, or rehearsing coordinated responses to potential aircraft hijackings in the North, practicing joint search and rescue drills?"

The UN High Representative for Disarmament Affairs, Sergio de Queiroz Duarte, reminds us that, “the Seabed Treaty of 1971 requires states parties, including all 8 states in the Arctic region, not to place on the seabed and the ocean floor and in the subsoil thereof, nuclear weapons or any other types of weapons of mass destruction, as well as structures, launching installations or any other facilities designed for storing, testing or using such weapons.” Extending the treaty to include a prohibition on the stationing of nuclear weapons anywhere else in the region would seem logical.

Rather than a single treaty, Duarte says he sees the gradual emergence of an eclectic Arctic security regime, consisting of various elements derived or adapted from other multilateral arrangements, and applied to the specific conditions of the Arctic region.

In conclusion, let me take a quote from a surprising source, Royal Dutch Shell (surprising because I have been boycotting shell since the days of Apartheid...).

Shell has produced what they call “Energy scenarios to 2050.” They were developed to help think about the future of energy, and the result is two scenarios that describe alternative ways it may develop: Scramble and Blueprints.

In the Scramble scenario, events outpace actions, and policy makers pay little attention to more efficient energy use until supplies are tight. Likewise, greenhouse gas emissions are not seriously addressed until there are major climate shocks. Will national governments simply Scramble to secure their own energy supplies?

In the Blueprints scenario, actions outpace events. Growing local actions begin to address the challenges of economic development, energy security and environmental pollution. Blueprints emerge from coalitions between various levels of societies and government, ranging from the local to the international, that begin to add up to a new energy framework.

As climate change continues and energy demand rises, nations are looking to the Arctic as their next source of energy supply. In a nuclear armed Scramble, the risk of confrontation is too dangerous to tolerate.

Our task here is to see into the future, and act now. Blueprints can emerge from coalitions between various levels of societies and government, ranging from the local to the international, that begin to add up to a new energy, environmental and security framework.

That is everyone’s challenge.

Thank you.