

**U.S. Senator Mark Begich Remarks**  
**3rd Symposium on the Impacts of an Ice-Diminishing Arctic**  
**on Naval and Maritime Operations**  
**June 9, 2009; Annapolis, Maryland**

*“America’s Leadership in the Second Arctic Century”*

Thank you, Dr. Clemente-Colon, for that introduction and your kind invitation to participate in this third symposium on the Arctic.

I’m honored to be among the impressive line-up of experts you have attracted to this conference, including NOAA Administrator Lubchenco, Admiral Allen and many others.

Devoting a symposium to the impacts of an ice-diminishing Arctic is especially timely. I just returned from several days in Anchorage where they are enjoying a record warm summer, with temperatures over 70 degrees - which is a heat wave for us.

There’s a lot of hand-wringing about global climate change in the Congress, but after a long, cold winter, my constituents are certainly enjoying the up-side.

Let me also note that I just returned from a visit with four of my Senate colleagues to Afghanistan and Pakistan.

A land-locked country is the last place I thought I would see the Navy. But in Afghanistan we encountered members of the Navy manning Provincial Reconstruction Teams, electronic warfare specialists, SEABEE’s (construction units), Embedded Training Teams (ETT’s) working with the Afghan National Army, and fighters overhead providing close air support.

The Navy’s effort in supporting America’s mission in South Asia – and around the world - is truly impressive. Thank you for your service.

The timing of this conference is also especially appropriate on this, the 100<sup>th</sup> anniversary of the so-called “discovery” of the North Pole. I say “so-called” since we all know the Pole was not really “discovered” back in 1909. People have lived in the Arctic since time immemorial.

But 1909 was when the first people from outside arrived at the top of the globe and that remote location captivated the world. Those who have read Arctic history also know of the competing claims between Robert Peary and Frederick Cook as to who was really there first - if either.

I won’t try to navigate the treacherous waters of that rivalry today. But being here in Annapolis, I suspect the admiral may be the local favorite.

Other explorers followed in what might be called the First Arctic Century. They used technology that rapidly advanced in the decades that followed, from Peary’s dogsleds to Amundsen’s airship, to the nuclear-powered submarine *Nautilus*, the first vessel to reach the pole just over 50 years ago.

The decades that followed saw increased recognition of the Arctic for its strategic importance. Commercial airliners took quick advantage of shorter polar routes between the continents, not hindered by the ice that for centuries stymied explorers who sought the Northwest Passage.

The Arctic became a front between the superpowers during the Cold War. Cold both figuratively and literally for those who manned the icy DEW line stations and patrolled the frigid polar skies.

And with discovery of natural resources such as the massive Prudhoe Bay oil field in my state, the Arctic became recognized not as an icebound wasteland but as a storehouse of energy.

Today, at the beginning of the Second Arctic Century, the Arctic's ice is changing. Computer models now say climate conditions that had been forecast by the end of the century could occur much sooner.

Arctic sea ice is melting so fast most of it could be gone in 30 years. In many respects, it is melting faster than scientists and policy makers can respond.

The implications of the loss of that ice pack are enormous. For species such as polar bears and walrus that depend on ice for their survival. For the residents of the Arctic who depend on marine mammals to satisfy their nutritional and cultural needs. And for entire communities which are being undercut by erosion and thawing permafrost.

And given the importance of the Arctic icepack in regulating global climate itself, it is impacting not just northerners who are experiencing it first-hand, but our entire nation and world.

When this global air conditioner is knocked off kilter, it can result in climatic changes around the globe. Sizzling summers destroy crops and create wildfires in one area while severe storms inundate others.

Today I want to provide my perspective as a new U.S. Senator from the state which enables America to call itself an Arctic nation.

I'll discuss briefly what we are experiencing in Alaska, touch on developments underway in Congress to address climate change, and offer up a handful of policy proposals which I believe can help our nation better adapt to the Second Arctic Century.

When I first got to the Senate barely six months ago, a number of my colleagues would button-hole me to express concern about climate change. They'd say: "We should see what's happening by taking a congressional trip ... to Greenland."

I've been to Greenland – I went in January to a conference of mayors from winter cities. Nothing against Greenland; it's got a lot of ice that's melting, too. I don't hear the Greenland suggestion much anymore because I keep telling my fellow senators that Alaska is "ground zero" for climate change.

Consider these developments.

Storms on waters that are now ice-free are eroding sections of the Alaska shoreline at rates of 45 feet per year or more, and undermining entire coastal villages like Shishmaref and Kivalina. Thawing permafrost is causing roads and the foundations of homes to buckle.

A recent study by the University of Alaska's Institute of Social and Economic Research estimated that the impact of climate change alone will increase the cost of public infrastructure needs in my state by as much as 6 billion-dollars.

The release of massive volumes of methane stored in that permafrost - the so-called "Arctic feedbacks" - could only accelerate the pace of climate change.

Warming water temperatures are pushing cold water species north and attracting warmer water species from the south. Fishermen in Sitka are encountering the Jumbo Humbolt squid from Mexico, tuna have been caught near Homer, and invasive species like green crab are moving steadily northward.

Increasing ocean acidification - the result of absorption of carbon into the waters of our blue planet - doesn't grab many headlines. But it presents a real threat to shellfish, corals and even plankton, the very root of the marine food chain.

Diminishing ice also creates opportunities in the Arctic, which in turn bring new challenges to the region. For example:

The Alaska Platform, including the Beaufort and Chukchi seas, contains an estimated 28 billion barrels of oil - almost twice as much as has already been produced from the North Slope - and an estimated 38 trillion cubic feet of natural gas.

Arctic oil exploration has been conducted safely onshore in Alaska. Offshore development poses special challenges of how to respond to an oil spill in broken sea ice. It also has potential impacts on subsistence users who rely on marine mammals for their way of life.

The diminishing Arctic ice pack could open new grounds to commercial fishing. But this presents challenges to protect fish stocks in this region that we know little about.

I support the North Pacific Fishery Management Council for proactively closing any commercial fishing activity in federal waters in the Arctic.

Such a closure is needed until stocks can be assessed and plans made to protect the sustainability of these resources and not impact the subsistence needs of people in the region. Since fish aren't known to respect political boundaries, we need the cooperation of Russia and Canada to make this precautionary closure truly effective.

Opening the Northwest Passage, Russia's Northern Sea Route and eventually the polar sea, will bring an increase in shipping and even tourism in the Arctic.

The recently released Arctic Marine Shipping Assessment is important to help guide our response to this challenge through enhanced marine safety, vessel tracking systems, search and rescue, and protecting Arctic peoples and the environment from the impacts of this commerce.

The nation's first publicly announced Arctic policy was adopted in the final days of the Bush administration. While not perfect, it recognizes our opportunities, challenges and responsibilities.

Back in Washington, Congress is focused on many climate change issues this session. For example, the Waxman-Markey bill deals with the contentious issues of how to mitigate our carbon footprint through greenhouse gas reductions, cap and trade, carbon offsets and other provisions. The bill is 923 pages long. Yet while Alaska is already experiencing the impacts of climate change, less than 10 percent of it deals with adaptation issues.

I believe there are numerous actions that Congress and the nation need to take to respond to the changing Arctic as we enter the Second Arctic Century.

### Ratify Law of the Sea Treaty

The most important single step we can take with the broadest implications for the future of the Arctic is ratification of the United Nations' Convention on the Law of the Sea. It was negotiated in 1982 to settle long-standing disputes over national rights to offshore waters and resources. And even while we have abided by its terms, the United States is among a handful of nations – including the likes of Libya, Iran and North Korea – that have not ratified the Law of the Sea.

By failing to ratify this important treaty, we deny ourselves a seat at the table at a time of great change in the Arctic.

While other nations have filed claims for Arctic continental shelf areas beyond their 200-mile limit, the United States lacks standing to claim such submerged lands and resources, including substantial amounts oil and gas.

I recognize that some oppose the Law of the Sea treaty on philosophical grounds. But I do not agree with their fears that ratification represents a threat to national sovereignty.

I think the greater threat is for our nation to be on the outside when other nations exert their sovereign authority in the Arctic.

And since the Arctic is a maritime region and Freedom of the Seas is a top national priority, the United States must be able to assert a more active and influential presence to protect our Arctic interests.

I believe we have the votes in the current Congress to ratify the Law of the Sea treaty. I have urged the leadership to bring this crucial issue up for a vote this summer. I hope you will support this effort.

When I became a senator and started working on this issue at the national level, I asked for a flow chart of who was doing what in the Arctic. There are more acronyms connected to Arctic than my 6-year-old son can produce in his alphabet soup. Despite my persistent requests, I still have yet to see such a chart.

From that and my growing experience with the issue, I believe the challenges of the changing Arctic cry out for a more concerted and focused attention of our government.

#### Appoint U.S. Arctic ambassador

I believe it's time to consider the appointment of an American Arctic ambassador to better coordinate national and international Arctic policy for the U.S. I appreciate the dedication of those who have represented us before the Arctic Council and other forums in the past.

I also appreciate the interest in the Arctic by shown by Secretary Clinton and the fact that Deputy Secretary of State James Steinberg led our delegation at the last meeting of the Arctic Council.

But I believe the United States needs equal standing with other nations which are represented by ambassador-level diplomats. In addition to a thorough understanding of Arctic issues and the science of climate change, our Arctic ambassador needs the stature to exercise leadership and vision in Arctic policy.

As we consider changes in how our government addresses change in the Arctic, I believe we should review our defense posture in this region.

From my seat on the Senate Armed Services Committee, I've learned that U.S. military responsibilities in the Arctic are shared by three separate commands – the North American, European and Pacific commands.

While I defer to the brass in the audience today about the specifics of military command structure, I want to know that we have a clear, coordinated and unified response to threats to our national security posed by an ice-diminishing Arctic.

#### Create Arctic Regional Citizen's Advisory Council

A key component of any national policy for the changing Arctic must be the involvement of indigenous peoples of the north. One hundred years ago, Robert Peary adopted the Arctic survival techniques of the Greenlandic Inuit. He relied on their knowledge and help to make it to the Pole.

So, too, is the incorporation of local and traditional knowledge critical in our development of the Arctic. The importance of local involvement has been underscored by the nation's new Arctic Policy, the Ilulissat Declaration, and even in the recent Arctic Marine Shipping Assessment.

That's why I propose the creation of a Regional Citizen's Advisory Council or RCAC for the Arctic. Similar to the council formed in Alaska's Prince William Sound in the wake of the tragic *Exxon Valdez* oil spill, this RCAC would ensure that local communities have a voice in development decisions affecting their lives.

This is not a roadblock to development. The Regional Citizen's Advisory Council process should be a pro-active way to ensure that development occurs in a responsible manner.

We need to start this process now. We don't need another *Selendang Ayu* shipwreck – or another *Titanic* – to open our eyes to the threats and challenges of Arctic development.

### Better Address Problems of Arctic Peoples

One critical omission from the new presidential directive on the Arctic is how to deal with the health problems of Arctic people.

Changing ice conditions are making hunting in the North more dangerous, limiting subsistence resources to local residents. That in turn affects the proud culture of Arctic people.

Alcoholism, suicide and rates of infectious disease in the Arctic are epidemic. We must better address how the changing climate is affecting the peoples of the North.

The Arctic Research Commission has called for an Arctic Health Research Plan that addresses health differences and meets the needs of Arctic residents for health research and health care delivery.

I fully support that initiative and call on the active involvement of appropriate federal agencies: Health and Human Services, the National Institutes of Health and the Centers for Disease Control and Prevention and others.

### Ratify Persistent Organic Pollutants Treaty

Another key action the Senate should take to address Arctic health issues is ratification of the POPS treaty.

Persistent Organic Pollutants like PCBs, DDT, dioxins and even fire retardants tend to accumulate in the Arctic, where they are carried by wind and sea currents and then trapped in the ice. There they bio-accumulate in the fatty tissues of marine mammals that are a main component of the local subsistence diet.

The POPs treaty was adopted in 2001. But like the Law of the Sea, it has never been ratified. We must change that and ratify this treaty.

### Improve Arctic Science

Critical to any development in the Arctic is a fundamental understanding of the science of the region. We need to invest in basic science to better understand the oceanography, hydrology, meteorology, biology of fish and marine mammals, as well as energy potential.

Every research season it seems the Arctic is crisscrossed with researchers working independently on projects, each producing good science. But too often they are not coordinating their field work and not integrating their findings into an ecosystem context.

We need a coordinated and integrated research and monitoring plan. It should start from baseline observations and include better science supporting Arctic-specific oil spill prevention and response methods.

This plan must include traditional knowledge. After all, some of the first and accurate predictions of Arctic climate change were from Native elders.

As we improve our science, we also need to promote Pan-Arctic research, especially with our Russian and Canadian neighbors, to address scientific issues that cross the Beaufort and Chukchi borders.

Alaska is a natural lab for Arctic research and already boasts world-class facilities, like the International Arctic Research Center at the University of Alaska Fairbanks.

And the Arctic Coast itself is home to the Barrow Arctic Research Center at the site of the old Naval Arctic Research Lab.

These facilities are important, but need to be expanded to fully provide for the needs of researchers and delve into fields of biomedical research and adaptation of renewable energy technology to Arctic conditions.

### Invest in Arctic Infrastructure

As America faces up to the challenges of the Second Arctic Century, we must increase our investment in basic infrastructure. This is vital to maintain a permanent presence in the Arctic, for scientific and national security missions. Critical to that is the need to replace our fleet of icebreakers.

The *Polar Sea* and the currently idled *Polar Star* have both served beyond their planned 30-year design life. These vessels need to be replaced to help carry out essential scientific research, maintain our national presence by patrolling our Arctic waters, monitor increased vessel traffic, and provide search and rescue and incident response.

Refitting the *Polar Star* may be a short-term solution to maintain an Arctic presence. The recent funding for a new Alaska Region Research Vessel with design capabilities to operate in the ice is another good step on the science front.

But our nation needs a plan to modernize and enlarge our Arctic icebreaking fleet for national security missions in the Arctic as well. To fulfill that mission, I look to the Navy to ensure our new *Virginia* class submarines are fully Arctic capable and crews are Arctic proficient.

We also need Coast Guard facilities closer than Kodiak, from which to base aerial surveillance and emergency response capabilities in the Arctic. I applaud the stamina of crews who've kept our C-130s in the Arctic by performing maintenance work out on the ramp in sub-freezing conditions. The least we could afford them is a heated hangar.

I look forward to working with Admiral Allen on these needs as Congress considers next year's federal budget.

In his memoirs, Admiral Peary bemoaned the widespread public misconceptions about the Arctic. When he arrived back from his journey, he was frustrated when repeatedly asked about the size and shape of the North Pole, as if it were a pole in the ground.

Through the diligent work of many scientists, we have learned much over the past century. But as we enter the Second Arctic Century, there is much we still do not understand.

This century brings great challenges and great opportunities. To succeed, we must address the broader policy implications of an ice-diminishing Arctic on the diplomatic, scientific and national security fronts.

We must make the needed investments to ensure the United States maintains its leadership at the top of our globe. And we must listen to and address the needs of the residents of the Arctic.

I commend your good work over the next three days and look forward to the proceedings of this symposium. Thank you. And as we say in Alaska: “North to the Future.”