

Chief of Naval Operations

Adm. Gary Roughead delivers remarks at the

4th Symposium on the Impacts of an Ice-Diminishing Arctic on Naval & Maritime Operations

June 20, 2011

Thank you, Pablo [Clemente-Colon]. Dr. Lubchenco, good to see you again. Adm. Papp, always a pleasure; Bob and I have an opportunity to see each other several times during the week but I'm really pleased that we're here today. I'm pleased to be able to join you in this symposium and talk a little bit about the Navy's view and how we envision the future of an area that we watch with great interest and is certain to be an area where the level of activity is going to increase in the coming years. Since this forum began in 2001, our Navy has benefitted from the development and the discussion of the Arctic Symposium, as it has improved our appreciation greatly for an ice-diminished Arctic and the security implications that will follow from that physical change that will take place.

This broader examination is something that we've endeavored to focus on systematically since we stood up our Task Force Climate Change in May 2009, and issued our Arctic Roadmap that same year. And rather than all the answers, what our efforts have given us is an appreciation of just how dynamic the study of the region is and surely will be in the future. In looking back on the state of the scientific debate during previous meetings, I was struck by how the estimates for decreasing sea ice extent per decade have risen from 3% to around 9% over the last ten years, presumably due in part to the improving satellite passive microwave data that we now have at hand, and the better access we are afforded by prevailing trends over time.

This symposium is a great opportunity, therefore, for those of us in the Navy to listen, participate, and to increase our understanding of a region that will move, slowly but surely, to the forefront as we consider our maritime operating

environment. Because at a fundamental level, the trends point undeniably towards a new venue of operations and responsibility for our global Navy – for preserving American interests in free and fair access there – and in light of this we remain committed to preparing exhaustively for the challenges and especially for the opportunities that are going to exist in an ice-diminishing Arctic.

The U.S. Navy's interests in the Arctic are not new, of course. We have many decades of experience with exploration and, indeed, episodic operations in the waters of the Arctic Circle. Although the August 1958 circumnavigation of the North Pole by our first nuclear submarine, USS *Nautilus*, didn't lead to "nuclear powered cargo submarines" as many promptly predicted, plying the northern routes immediately after that fact, it did raise the profile of the Arctic for seafarer and scientist alike. A March 1959 National Science Foundation 'Arctic Status Report' showed the considerable extent of collaboration among leading universities, national labs, and naval researchers at the time, and a group which would have compared favorably with the expertise gathered here and the kind of experts who take part in our biennial 'ICEX' series of exercises that we conduct to this very day.

But never has our interest encountered the confluence of trends, as projected by the U.S. Geological Survey in 2008 and the National Research Council this past March, that promises to change the Arctic so pervasively, and in so doing affect the global environment for which we plan and program our future fleet. The trends we see there of course uncover new possibilities for resource extraction in the near term. Efforts are already underway, and not just among the Arctic nations, to seize the economic potential of a region estimated to contain 22% of the world's oil and natural gas resource base, and trillions in economic potential. Norway's state pension fund alone, based significantly on Arctic oil revenues, surpassed \$500 billion in value last year.

In the medium term, we can expect a growing volume of activity in Arctic waters as presently cost-prohibitive barriers to entry for resource extraction begin to fall, and as things such as eco-tourism gain in popularity. Then, in 20-25 years' time, the much-anticipated northern routes will open and become viable for a broader spectrum of commercial

players during several months each year, changing the patterns of global seaborne trade in ways that are, quite frankly, as yet unknown.

In projecting the impact of climate change in the northern latitudes, however, I'm reminded of what Dr. Lubchenco observed just this past March, when she said, "what happens in the Arctic does not stay there." The trends we discuss here, in a similar timeframe, promise more disruption and disorder in a world whose population is growing rapidly, and moving to megacities on or near the coasts of almost every continent. The prospects of sea level rise, for some megacities, or the coral islands of the Maldives, are similarly daunting. We also have to consider the likely frictions that arise as fishing stocks migrate with changing sea temperatures, and the very real possibility that conflicts in the future will be fought over access to dwindling natural supplies of fresh water.

It is because of these projections that our Navy is preparing for increased demand, both in the region - where we will maintain our access and uphold the freedom of navigation as a global good - and beyond, where we expect developments to expose the costs of our national reluctance on the Law of the Sea convention and to test our present understanding of customary legal guarantees to the very freedoms behind our global operations today. We are considering the technical requirements for polar operations to support our strategic objective of a safe, stable, and secure Arctic region where our national interests are safeguarded – namely, how and when to build forces capable and competent for the harsh northern climes.

We also remain well aware of how important maritime partnerships will be in addressing capacity concerns as we seek to reinforce universal values in the global commons. Some speak of a changing Arctic in terms of either a race or a zero-sum game. As far as the U.S. Navy is concerned, it is neither. Rather, we see it as an opportunity to extend to the 'Fifth Ocean' the principles that have benefitted all peaceful nations in the other four. Secretary of State Clinton's attendance at the meeting of Arctic Council ministers last month in Nuuk, Greenland, signals the United States' level of interest in the region, as well as our belief in the power of international cooperation to advance mutual interests in

the free use of the maritime domain. It was also inherently practical in that it forged the much-needed agreement among Arctic states to improve our coordination on search and rescue.

As we stated in our Arctic Roadmap, the Navy will continue to pursue cooperative relationships around such areas of common interest, whether mission enablers like Maritime Domain Awareness, core naval capabilities such as humanitarian assistance and disaster response, or intra-governmental relationships like defense support to civil authorities. Exercises such as the Canadian Navy's 'Operation Nanook,' which we observed in 2009 and had the privilege of participating in last August alongside our Coast Guard counterparts, enhance our preparedness in several of these areas, and lay the basis from which we might extend the same maritime partnership and interoperability we have come to value so highly in our global operations. Joint exercises such as the U.S. Pacific Command's 'Northern Edge' – which started just outside of the Arctic Circle one week ago today and will continue throughout this week – ensure that we as a Navy remain ready to partner at the high end of operations as required.

So while this symposium and the Navy's Arctic Roadmap are studies in change, the events we see unfolding in the Arctic first and foremost reinforce for us basic conclusions about the importance of a *balanced* Navy capable of sustaining its forward presence *globally*. The trends and projections that you discuss here – and just as crucially the relationships that are nurtured here – will help us greatly to gauge our approach to a time when part of being forward means being in the Arctic.

I thank you and I look forward to your questions.