



6.3 NAVAL OPERATIONS IN EUROPE AND AFRICA

Admiral Harry Ulrich III

First, I would like to express my gratitude to CNA and The Johns Hopkins University Applied Physics Laboratory (JHU/APL) for hosting this conference. My remarks today will be based in large part on a paper that was done by the Center for New American Security in 2008. The report was titled *Uncharted Waters, the United States Navy and Navigating Climate Change*. [1] I encourage you to read it.

A 1972 graduate of the U.S. Naval Academy, Admiral Harry Ulrich III has served in a broad range of sea and shore assignments during his 35-year career in the Navy. He served his sea tours with units of the Atlantic Fleet and participated in deployments to South America, West Africa, Northern and Southern Europe, and the Arabian Gulf. His shore assignments included over 10 years in Washington, DC, working for the Joint Chiefs of Staff and the Chief of Naval Operations. In 1981, Admiral Ulrich earned a master of science in physics from the U.S. Naval Postgraduate School, and in 1989 he studied at the National War College in Washington, DC. During the last 4 years of his career, he served in Europe, first as Commander of the Sixth Fleet and subsequently as Commander of the U.S. Naval Forces Europe, where he was responsible for providing overall command, operational control, and coordination of U.S. naval forces in the European Command area of responsibility, including Africa. He concurrently served as Commander of Allied Joint Force Command Naples, where he had operational responsibility for North Atlantic Treaty Organization (NATO) missions in the Balkans, Iraq, and the Mediterranean. Admiral Ulrich retired from the Navy in February 2008. Since retiring he has accepted positions as a Distinguished Fellow at the CNA Corporation, Director of the Atlantic Council, Director of the First Tee of Jacksonville, Director of Oto Melara (NA), Director of MVM Incorporated, and as Executive Vice President of Enterra Solutions.

I also wanted to point out that I had the opportunity to discuss my remarks with Admiral Jim Stavridis, the current Commander of the U.S. European Command, when he was back in the States last weekend. Once again, it should not surprise you that his views and my views are generally aligned.

So let me start by focusing on energy. You have heard from the Secretary of the Navy, Rear Admiral Phil Cullom, and others that the Navy and the Department of Defense (DoD) are reducing their consumption of fossil fuels as directed by legislation and executive orders. Most of the effort so far has been focused on shore-based establishment and support functions. But the operating forces will be increasingly affected out of necessity.

I believe that commanders are increasingly considering energy costs, including the carbon footprint, when they develop their operational plans and their requests for forces. That is as it should be. To stay relevant, naval forces must reduce their energy consumption by (1) operating more efficiently and (2) producing more energy-efficient platforms in the long term. We do not want to price ourselves out of the marketplace.

Now, notably our carriers and submarines are particularly attractive in this regard. But our surface forces have their work cut out for them in the coming years. I know the Office of Naval Research and others have been working on this effort for years. But we now need to implement efficiency improvements by back-fitting our existing fleet when possible and realizing efficiency in our construction designs and our construction programs.

The Littoral Combat Ship (LCS) program has been mentioned and it certainly comes to mind in this regard. We will soon down-select between two existing variants. But I sense that it is probably too late to make fuel efficiency a key parameter in the source selection deliberations. And that is unfortunate. But it should have been considered and undoubtedly will be considered in our next round of ship programs. Such consideration is in alignment with the Chief of Naval Operation's direction that the Navy take total ownership costs into account. The LCS ships, although they will not be nearly as energy efficient as we would like, will be the

workhorse for many of the future missions in Africa and Europe for years to come. Although it is too late to affect the design, we will need to achieve efficiencies in the way in which we choose to operate those ships.

Shifting to climate change, I am going to highlight and offer some thoughts on how naval operations could morph given the following three factors: first, the frequency and severity of storms, which has been discussed already; second, different operating environments; and, third, the opportunity for new sea lines of communications in the Arctic as has been discussed.

With regard to changing weather patterns, you do not need to be a meteorologist to note that storms seem to be more frequent and violent. I certainly do not need to tell people in Washington, DC, about that. The immediate impact on naval forces is to pay attention and be increasingly agile in outmaneuvering these brutal forces of nature. The naval forces should not be a victim of weather.

But it is not news that the Navy is becoming the force of choice for humanitarian assistance and disaster relief missions. This growing role in humanitarian assistance and disaster relief has now emerged as a critical and high-profile new mission area in our new maritime strategy. We explicitly state for the first time that this is part of our mission areas.

Given that disaster relief is part of what we do and given that we are told to expect increasingly volatile weather, the Navy needs to dedicate even more intellectual effort in disaster relief mission planning and operational exercises. Above all, we need the right forces deployed to execute these kinds of contingencies. Now, to be clear, the Sixth Fleet has many missions it needs to be prepared for. Disaster relief is but one. So the challenge before our force planners is this: How do we develop a blended force capability mix that will be suboptimized for any particular mission yet has the capacity to handle them all? Solving that problem will require some science and a lot of art.

At this point, it is worth stating the obvious. Our European allies have a robust capability in the European area of responsibility; our African partners not so much. So I recommend that we need to

encourage NATO to include African disaster relief operations in its ambitions and in its plans. We need to be part of that team.

The second point I want to make is with regard to the different operating environment we are going to face. There is a reason the Navy has an established corps of meteorologists. We have long known that operating at sea is not for the faint of heart. But it sure is easier if you understand and can predict your environment. Over the years, we designed the most sophisticated models to help us operate in, over, and under the sea. I am hopeful that our meteorology and oceanography specialists are gauging whether these models are robust enough to accommodate even the direst of climate change assertions.

For one, I believe that undersea warfare is the most difficult of our profession's challenges. If, as predicted, the ocean currents change course, temperature gradients become inverted, acidity increases, and salinity levels fall, we need to be able to answer these questions: (1) What impact will these phenomena have on our existing sensors, models and weapon systems? And (2) which technical tools or tactics that were abandoned long ago because they did not work would be relevant in tomorrow's potential new climate and the Navy's new situational reality?

Now I will shift to my third point—the possibility of new sea lines of communications in the Arctic. Many have predicted it. And if this is to be true and there will be a need to operate in the high latitudes, will our ships and aircraft be capable of operating in such harsh environments? How well do we understand the environment? So before we commit to saying we are going to operate there or we will be able to operate there, I think we need to ask the naval engineers to give us a thorough assessment of what our current fleet can and cannot do and what modifications we can make to them if we are asked to operate in the high north.

I would like to digress for just a minute to point out and observe that the first two points—changing weather patterns and new ocean environment—are operational and tactical issues. Though complex, these issues can be solved by applying modern science, technology, and computers. But access to the Arctic is a

very strategic matter that will undoubtedly challenge us for some time to come.

No country owns the Arctic Ocean. But Russia, Norway, Canada, Denmark, and, of course, the United States border the Arctic Ocean. In 2005, the Northeast Passage was opened for the first time. In 2007, the Northwest Passage was opened. And, by 2008, both were navigable. So keep in the back of your mind that there is gold in those hills or under that water so to speak. In the area is a whole stockpile of natural resources that I do not think we completely understand yet. When we open the door to the Arctic, not only will there be seaborne transit, but there will be seaborne extraction of some sort for sure.

It should be clear that the high north is becoming an area of special strategic interest. Will it be a zone of cooperation, competition, or conflict? Which one of those “C’s” will it be? This is a matter for great statesmen to determine. But to be sure, naval forces will be useful tools as they posture and deliberate. Before this issue heats up too much, I recommend we set a course for cooperation by assembling the maritime forces of the intrinsic countries, getting them together, and working on collaborating on matters of import in science and navigation. I also argue that the established Arctic Council is the proper umbrella organization for this effort. In fact, its charter was designed for just this.

Note that I specially stated that maritime forces of interested states. I believe that the U.S. Coast Guard has the comparative advantage to lead the U.S. effort in this regard. If the Navy took the lead, it might appear to be the first step towards militarization of the Arctic, which is exactly what we want to avoid. However, I do not want to leave you with the impression that our Navy ships and aircraft should not be operating there. Indeed, I believe just the opposite. We need to make the statement that these are international waters and freedom of navigation applies; hence, my earlier comment that we need to understand and adapt our forces to be able to operate in the high north.

In closing, I wish to make four main points. First, we need to understand and accept that energy will only get more expensive

and, therefore, that the Navy needs to become even more cost effective. Second, the demand for humanitarian assistance and disaster relief will only grow. Third, being on the cutting edge of the science of oceanography has been and will continue to be fundamental to mission success. And, fourth, we need to shape the debate on access to the Arctic region. Thank you very much for your attention. I look forward to taking your questions.

REFERENCE

1. Sharon Burke, Jay Gullledge, Michael Horowitz, Christine Parthemore, and Nirav Patel, *Uncharted Waters: The U.S. Navy and Navigating Climate Change*, Alexandria, Virginia: Center for New American Security, 2009, <http://www.cnas.org/node/849>.