



# RHUMB LINES

*Straight Lines to Navigate By*



November 30, 2009

## Task Force Climate Change and the Arctic Roadmap

*“As the climate changes in the Arctic at a dramatic pace, both the National Arctic Policy and the Maritime Strategy anticipate increased naval missions in that region. The Arctic Roadmap will help the Navy prepare for the future in a scientifically sound and fiscally responsible manner.”*

– Rear Adm. Dave Titley, Oceanographer of the Navy and Director, Task Force Climate Change

With over a thousand miles of Arctic coastline, the U.S. has strong national security and homeland defense interests in the region. The Arctic is experiencing a trend of diminishing sea ice extent and thickness creating the likelihood of increased maritime activity in the region, including trans-oceanic shipping and resource extraction.

### Task Force Climate Change

To address the Navy’s future actions regarding the Arctic specifically, and global climate change in general, the Chief of Naval Operations established Task Force Climate Change in May 2009.

- Task Force Climate Change is led by the Oceanographer of the Navy with representation from across the Navy staff, program offices, and the operational fleet, and in collaboration with the U.S. Coast Guard and National Oceanic and Atmospheric Administration.
- Task Force Climate Change makes recommendations to Navy leadership regarding policy, strategy, force structure and investments relating first to the changing Arctic, and subsequently to global climate change.

### A Challenging Environment

Despite greater access, the Arctic will remain a challenging environment for naval operations.

- Naval interests in the Arctic include missile defense, strategic sealift, maritime presence and security, and freedom of navigation and over-flight.
- While Navy submarines have considerable experience in the Arctic, weather conditions are very harsh and present a significant challenge for surface operations.
- Even though there is a significant diminishment of multi-year Arctic sea ice during the summer, the area remains frozen over with seasonal ice for most of the year.

### The Arctic Roadmap

On Nov. 10, the Vice Chief of Naval Operations signed the Arctic Roadmap for the Navy. This document lays out a plan to ensure naval readiness and capabilities continue to match the changing environment and maritime activities in the Arctic.

- Key elements of the plan include increasing operational experience, promoting cooperative partnerships and improving environmental understanding.
- Recommendations from the Roadmap include an assessment of current readiness for Arctic operations, the continuation of Arctic and sub-Arctic training exercises and investments in more sensors to enhance maritime domain awareness and environmental data collection and modeling capabilities.
- The Roadmap advocates cooperative partnerships and collaborative efforts with joint, interagency and international Arctic stakeholders regarding operations and training (specifically search and rescue and humanitarian assistance/disaster response), interoperability, environmental observing and surveying, scientific research and computer modeling to enhance predictive capabilities regarding climate change.

### Key Messages

- The U.S. is an Arctic nation with varied and compelling interests in the region.
- The National Arctic Policy requires the Navy to be prepared to increase engagement in the Arctic.
- Currently the risk of conflict is low. All five Arctic nations have pledged to resolve territorial claims through existing multilateral mechanisms.

### Facts & Figures

- The Arctic is warming twice as fast as the rest of the globe and the summer ice cap is half the size it was 50 years ago.
- A recent study by the U.S. Geological Survey revealed “90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids may remain to be found in the Arctic.”