



RHUMB LINES

Straight Lines to Navigate By



March 9, 2009

Ice Exercise 2009

“We are developing and shaping the future geo-political character of the Arctic. The ability of submarines to provide assured access and credible combat power in the Arctic environment increases our Maritime Domain Awareness in that strategic area. Maintaining the technical and operational expertise required to safely and effectively operate in this unique environment is an important reason why we have continued to engage in this region for more than 50 years.”
– Vice Adm. John J. Donnelly, Commander, Submarine Force

In January, 2009, the National Security Presidential Directive on the Arctic Region was signed. It states that “The United States has broad and fundamental national security interests in the Arctic region and is prepared to operate either independently or in conjunction with other states to safeguard these interests.” The Navy’s Ice Exercise (ICEX) program is the means by which our Submarine Force develops and hones their operational and war fighting skills in this challenging and unique Arctic environment.

Arctic environment plays a key role in national defense

- The Arctic region is primarily a maritime domain and freedom of the seas remains a top national priority. Preserving the rights and duties relating to navigation in the Arctic region supports our ability to exercise these rights throughout the world.
- The Arctic Ocean borders several nations and is a critical waterway that connects the Atlantic and Pacific Oceans.
- The continents of the Northern Hemisphere – Europe, Asia, and North America – all share the Arctic Ocean.

Submarine operations in the Arctic present unique challenges

- The presence of an overhead ice canopy alters the methods by which the submarine communicates, navigates, and maintains its habitability.
- River runoff and ice melt cause significant variations in the acoustic profile of the Arctic. This is further compounded by the presence of a contoured, reflective ice canopy overhead.

ICEX 2009 provides the opportunity to conduct submarine testing under the Arctic pack ice

- ICEX provides the Submarine Force with opportunities to test combat systems, sonar systems, communication systems and navigation systems in a challenging operational environment.
- ICEX is supported by a temporary ice camp in the Arctic Ocean. In March 2009, the Submarine Force will establish the ice camp in a location where submarines will conduct operations and training.

Key Messages	Facts & Figures
<ul style="list-style-type: none"> • The Arctic region is primarily a maritime domain. Navy policy, interests, and missions are the same in all maritime domains. • Submarines have conducted under-ice operations in the Arctic region in support of inter-fleet transit, training, cooperative engagements and operations since USS Nautilus made the first transit in 1958. • ICEX 2009 enables the Submarine Force to operate and train in the challenging and unique environment that characterizes the Arctic region. 	<ul style="list-style-type: none"> • USS Annapolis (SSN 760) and USS Helena (SSN 725) will conduct operations during ICEX 2009. • The Navy contracts with the Applied Physics Laboratory, University of Washington, to handle the camp construction and logistics. The camp will be called “APLIS-09” for “Applied Physics Lab Ice Station.” • The camp for ICEX 2009 will be set up on a piece of arctic pack ice approximately 200 nautical miles north of Prudhoe Bay, Alaska, and will support approximately 60 personnel.