

Missions

Arctic Domain Awareness

Each Arctic Domain Awareness mission is unique. Weather, passengers, cargo and concurrent missions require each evolution to be different. Each aircraft commander is expected to optimize the patrol time and accomplish as many of the objectives as possible. Along with logistic support to any on going Coast Guard mission in the Arctic, specific patrol objectives include:



*Ports, Waterways and Coast Security - Patrol of the Alaskan coast, above the Arctic Circle (66 degrees 33 minutes North).

- Locate, identify and document any surface contacts north of the Arctic Circle.
- Coordinate intelligence gathering and verification.

*Coastal Erosion - Document the condition of coastal communities experiencing severe impact from coastal erosion.

*Ice Observation - Conduct ice edge observations, report findings. Document ice conditions and edge with photos/video.

*Science of opportunity - Support science of opportunity requests.

*Media outreach - Provide opportunity for media participation and familiarization.

*Training - Pilot and crew familiarization and training above the Arctic Circle. As flight profiles and weather allow, aircrew are to become familiar with operations in and around the following locations:

- | | | |
|--------------------------|----------------------------|----------------|
| - Kivalina | - Delong Mountain Terminal | - Red Dog Mine |
| - Point Hope | - Cape Lisburne | - Point Lay |
| - Wainwright | - Prudhoe Bay/ Deadhorse | - Barrow |
| - Eielson Air Force Base | | |

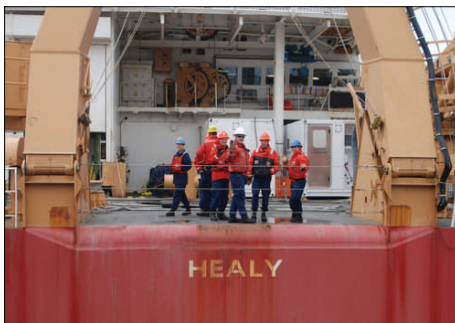


The Coast Guard has over 2,000 active duty, reserve, auxiliary and civilian members in Alaska who are responsible for the success of a variety of missions over more than 33,000 miles of coastline and more than 950,000 square miles of water.



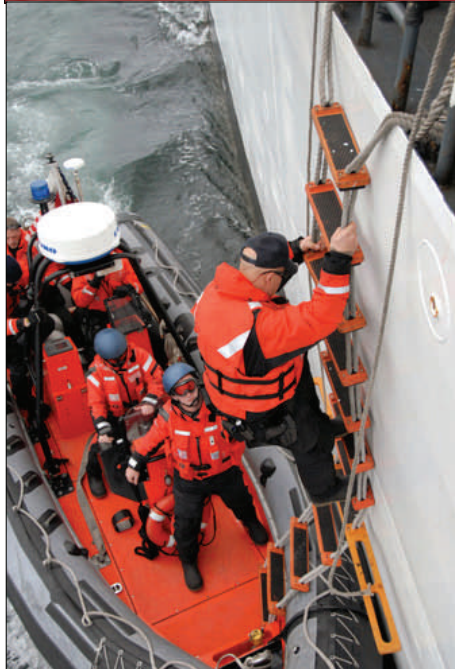
Based on priorities outlined in the National Security Council's interagency review of Arctic policy, it is anticipated that the Coast Guard will have to extend these roles and missions in to the Arctic in the next five to ten years:

- Enhance National Security
- Project U.S. presence
- Protect sovereignty in Arctic
- Advocate Environmental Stewardship (pollution prevention and living marine resource protection)
- Facilitate safe navigation and protect Arctic maritime commerce associated with destination traffic Waterways management Arctic shipping standards via IMO
- Enhance boating safety
- Prosecute SAR (eco-tourism and subsistence fishing/hunting)
- Enforce arctic mariner credential/licensing standards
- Support expanding year round research in Arctic



Over the summer the Coast Guard tested the capability of crews, boats, ships and air craft for operations in the Arctic. It established a baseline for operations and helped outline the challenges for operating north of the Arctic Circle so those challenges can be met and overcome.

The Coast Guard has partnered with NOAA to track methane and carbon dioxide emissions over the state using instruments on a C-130 Hercules aircraft and worked with NOAA, U.S. Interagency Arctic Buoy Program (USIABP) to the Arctic Observing Network (AON) and the International Arctic Buoy Program (IABP) to drop an ocean drifting buoy that will monitor synoptic-scale fields of surface air pressure, air temperature, and ice motion throughout the Arctic Ocean.



The Coast Guard Cutter Healy, an icebreaker based out of Seattle, spent several months during 2008 and 2009 mapping the extended continental shelf to provide material to substantiate the U.S. territorial claims to portions of the Arctic under the United Nation's Convention on the Law of the Sea. The Coast Guard also used the cutter SPAR, based out of Kodiak, to conduct mapping missions as well and take soundings in many of the bays and sounds in 2008. Charts of the Arctic are limited and lack detail. The possibility of establishing aids to navigation and shipping lanes may exist and this data will be necessary to do that.

The Polar Sea, another Coast Guard icebreaker from Seattle, conducted winter science missions in 2008 and is expected to return to the Arctic in the fall of 2009.