

Introduction

Good afternoon Chairman Stevens, Chairman Lugar, Senator Inouye, Senator Biden, and distinguished members of the Committees. It is my pleasure to appear before you today to discuss the Coast Guard's role in the International Polar Year (IPY). The International Council of Science (ICSU) and the U.S. National Academies have stated that goals of the International Polar Year (March 2007 through March 2009) are: to explore new frontiers in polar sciences; improve our understanding of the critical role of the earth's polar regions in global processes; create a legacy of infrastructure and data for future generations of scientists; expand international cooperation; engage the public in polar discovery; and help attract and educate the next generation of scientists and engineers.

Fifty years ago, four Wind Class Coast Guard icebreakers supported U.S. efforts in the 3rd International Polar Year and International Geophysical Year. Coast Guard polar icebreakers also participated in the first Operation Deep Freeze in 1956, which established a stable U.S. presence on the Antarctic continent by forging a path through the challenging Antarctic ice belt, allowing a U.S. naval task force to establish permanent bases at McMurdo and the South Pole. Today, one heavy Coast Guard polar icebreaker, the Cutter POLAR SEA, remains to support the U.S. Antarctic Program re-supply effort; the other heavy polar icebreaker, the Cutter POLAR STAR is in caretaker status and could be available for use with approximately 18 months advance notice, due to extensive maintenance requirements. In the Arctic region in 1957, the U.S. Coast Guard successfully sent the Cutters STORIS, BRAMBLE, and SPAR through the Northwest Passage to determine the feasibility of an emergency Defense Early Warning (DEW) line shipping support route. Today, one medium Coast Guard polar icebreaker, the Cutter HEALY, remains to provide science and icebreaking support in the Arctic.

Since 1956, the Coast Guard has been a regular presence in the polar regions. Significant historical events have been the catalyst that influenced national polar policy decisions. These events have included: the purchase of Alaska; World War II; the Cold War; the 1956-57 International Geophysical Year; the Antarctic Treaty; and the oil crises of the 1970s. In addition to the planned IPY events, recent focus on issues such as the 1982 Law of the Sea Convention, increasing world-wide demand for natural resources, changing shipping patterns driven by a global economy, recent severe ice conditions in the Antarctic, and changes in Arctic sea ice have fueled U.S. debate on national polar policies and associated resource needs.

These recent and developing polar issues, coupled with U.S. interests in both polar regions, demand heightened awareness of our national polar missions. In particular, the United States must consider the increasing international initiatives in the Arctic. Thus far, the Arctic has witnessed a growing foreign polar presence and more frequent and assertive international claims on in the Arctic.

The National Science Foundation (NSF) has been tasked by the White House to provide leadership for the U.S. in the IPY. As the federal agency charged with providing all U.S. polar icebreaker needs, the Coast Guard is committed to working with the NSF, the science community and other federal agencies to provide the support needed to make the upcoming IPY a success. The NSF and other federal agencies have had general discussions with the Coast Guard about using polar icebreakers for the upcoming IPY, but have not made any specific requests outside of annually planned polar icebreaker activities in the Arctic and Antarctic.

Coast Guard Polar Icebreakers

The Coast Guard polar icebreaker fleet currently consists of the cutters POLAR SEA, POLAR STAR and HEALY. The POLAR SEA and POLAR STAR were built and commissioned in the 1970s and are nearly thirty years in age. The HEALY was commissioned in 1999 and has been actively supporting annual Arctic research deployments ever since. Unlike the older Polar class ships, HEALY was designed from the keel up as a science platform, with due consideration of Coast Guard multi-mission capabilities as well. Due to the harsh and remote polar environment and operating procedures for polar icebreakers, all of these vessels require durable marine engineering features in order to withstand years of colliding with sea ice (typically having the characteristics of concrete, found twenty feet thick or more, and at temperatures as low as negative 60°F). The unique environment in which polar icebreakers operate, coupled with their significant operating requirements, make the vessels inherently costly to operate and maintain.

Conclusion

The Coast Guard is committed to working with the science community and other federal agencies to provide the support needed to make the upcoming IPY a success. In accordance with

our existing Memorandum of Agreement (MOA), we will support the National Science Foundation, and other agencies' IPY efforts as requested and as funded. Thank you for the opportunity to testify before you today. I will be happy to answer any questions you may have.