

U.S. COAST GUARD POLAR ICEBREAKER OPERATIONS



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CDR LISA MACK



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OVERVIEW

- OPERATING AREAS / ENVIRONMENT
- CURRENT MISSIONS
- CUTTER STATUS
- FUTURE MISSION NEEDS
- BUDGET AUTHORITY



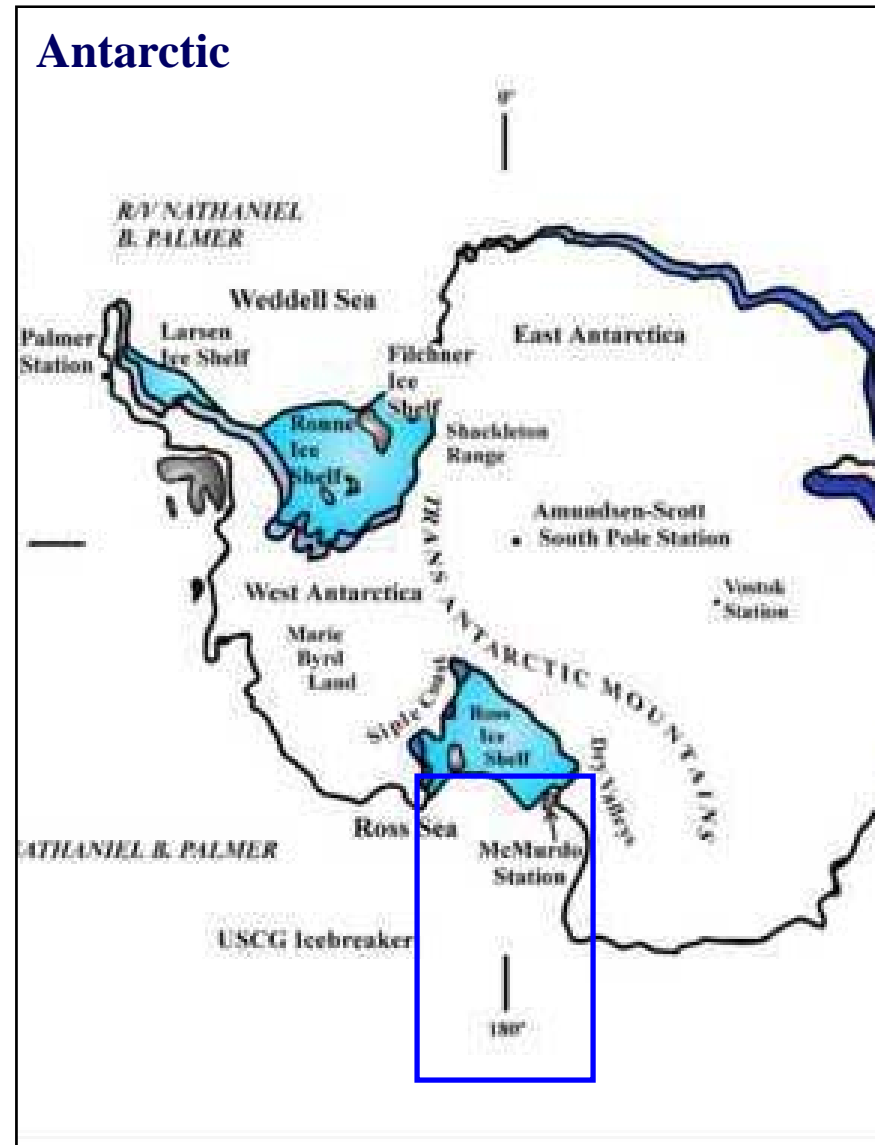
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OPERATING AREAS

Arctic

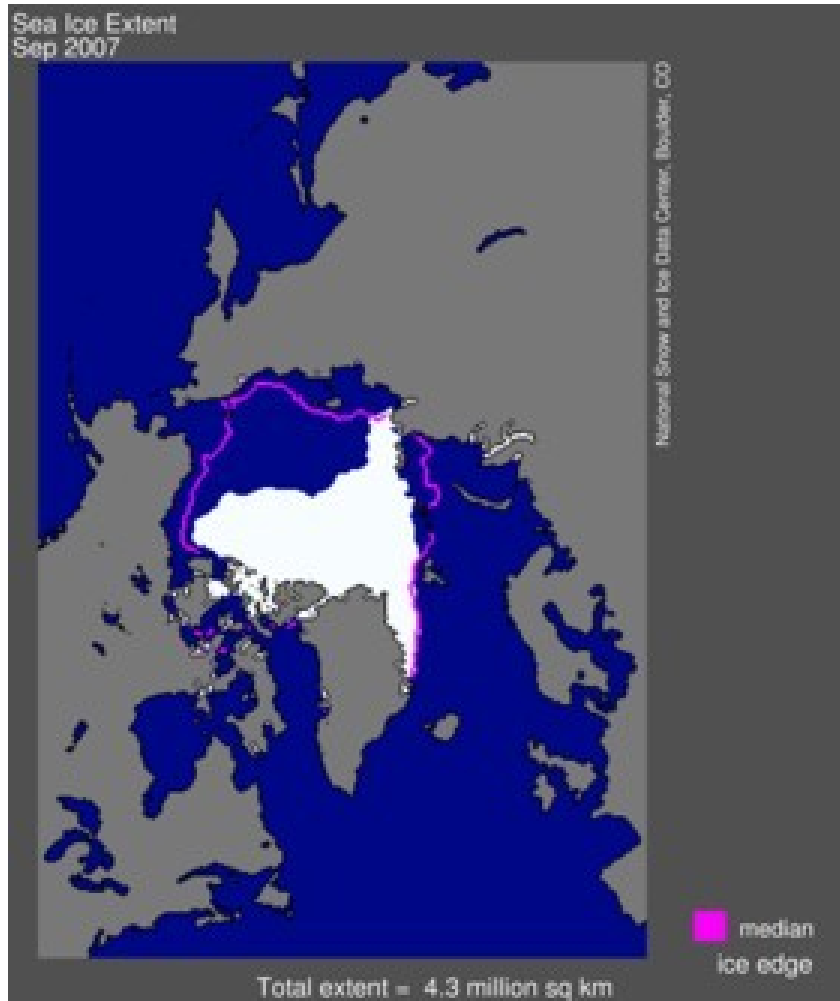


Antarctic

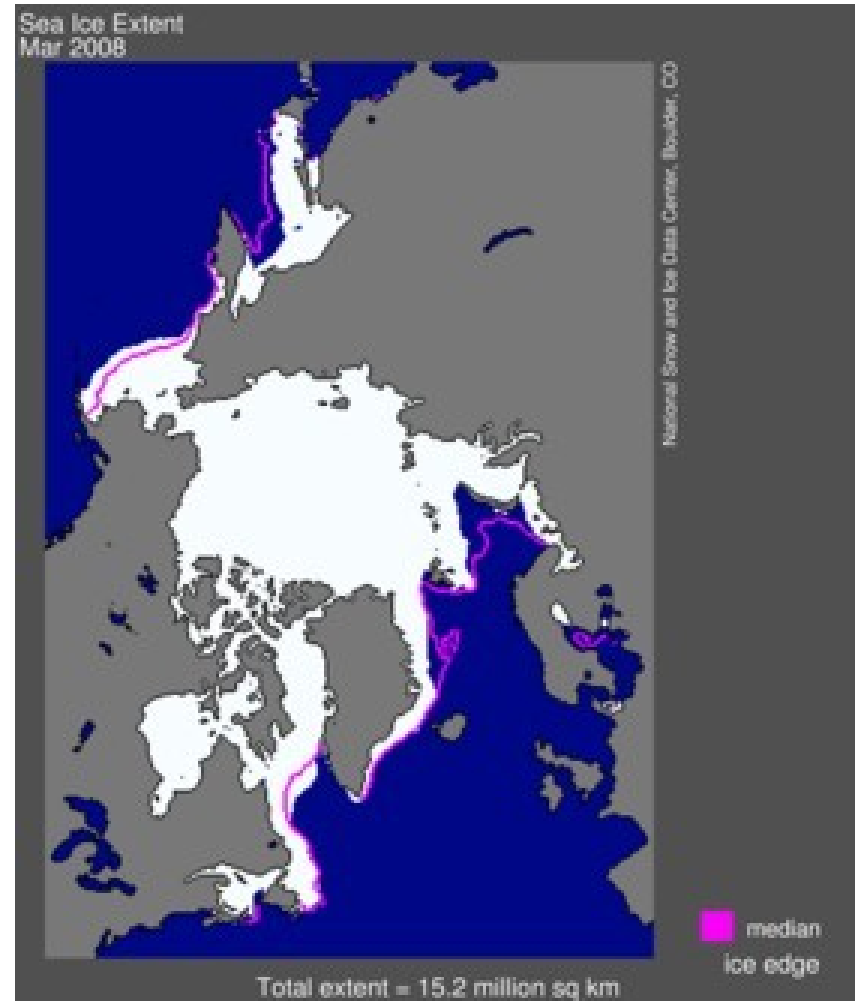


OPERATING ENVIRONMENT

Sea Ice Minimum



Sea Ice Maximum



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CURRENT MISSIONS

- SCIENCE – ARCTIC RESEARCH
- SCIENCE – EXTENDED CONTINENTAL SHELF MAPPING
- COAST GUARD MISSIONS
- LOGISTICS – ANTARCTIC RE-SUPPLY
- LOGISTICS – ARCTIC RE-SUPPLY



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Science - Arctic research

Primarily multi-year, multi-investigator studies:

Bering Ecosystem Study (BEST)

Benthic predator study

Seal survey

Hydrographic and acoustic moorings



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Science – Extended Continental Shelf Mapping

Bathymetry

-2003-2004

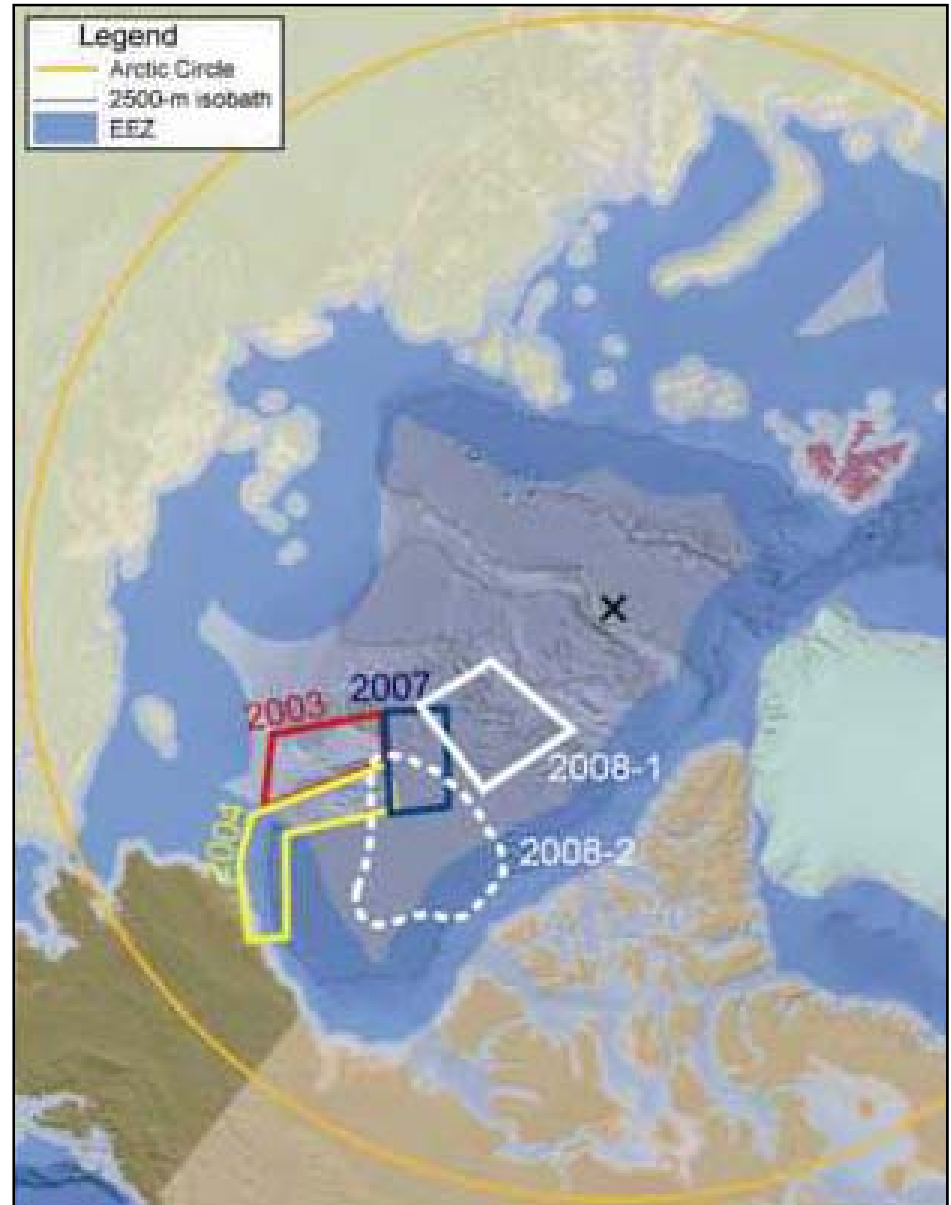
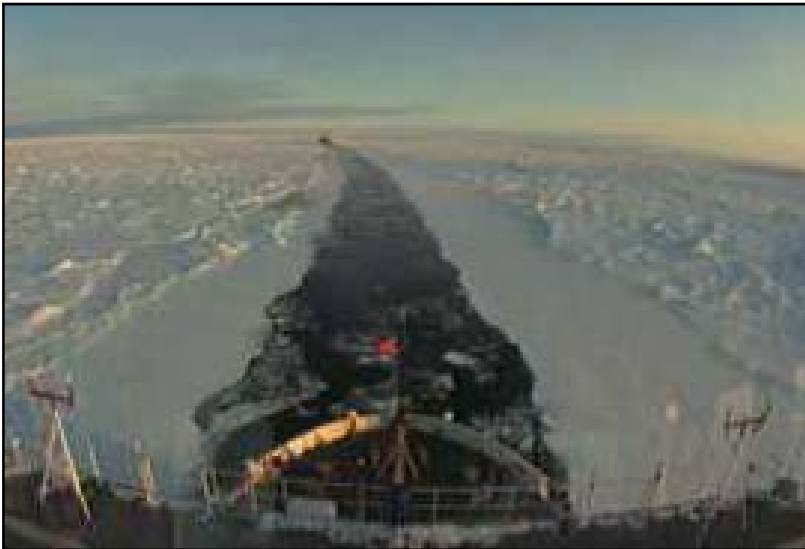
-2007-2008, planned for 2009

Seismic

-Joint Canadian Coast Guard mission

-2008, planned for 2009

-2010?



Coast Guard Missions

Search and rescue

Marine safety

Aids to Navigation

Marine Environmental Protection

Living Marine Resources

Other Law Enforcement

Ports, Waterways & Coastal Security

Defense Readiness



Polar Icebreaker Fleet

POLAR STAR, POLAR SEA and HEALY are the only U. S. surface assets capable of supporting U.S. national mission needs and operating in the polar regions year-round.

POLAR Characteristics:

Heavy Icebreaker

Length: 399' Width: 83.5'

Draft: 28' Displacement: 13.1k LT

Propulsion: Diesel-Electric/Turbine

SHP: 18,000 HP (Diesel)

60,000 HP (Turbine) / 75K (Burst)

Fuel: 1.3M gals

Continuous icebreaking: 6' @ 3kts

Backing & ramming: 21'

Science: up to 35 scientists

HEALY Characteristics:

Arctic Research Vessel/Medium Icebreaker

Length: 420' Width: 82'

Draft: 29.3' Displacement: 16k LT

Propulsion: Diesel-Electric AC/AC

SHP: 30,000 HP

Fuel: 1.22M gals

Continuous icebreaking: 4.5' @ 3kts

Backing & ramming: 8'

Science: up to 50 scientists



POLAR STAR commissioned 1976
POLAR SEA commissioned 1978



HEALY commissioned 1999

HEALY Status

- Completed Arctic West Summer 2008 deployment (six science phases)
- Conducted dockside maintenance in preparation for 2009 deployment
- Completed first half of Arctic West Summer 2009 deployment

Current issues:

- Increased demand for use of HEALY - study of maintenance and personnel requirements to support increased demand completed and being reviewed
- Multi-beam sonar replacement requested by science community scheduled for 2010 drydock
- NOAA Corps Officer assigned as Marine Science Officer



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POLAR SEA and STAR Status

POLAR SEA

- Required extensive motor repairs following 2004 Antarctic mission
- Additional work completed in 2007 expected to extend service life to 2014
- Successful Antarctic mission Nov 2006 - Apr 2007
- Standby for 2008/2009 Antarctic missions
- Conducted spring and fall 2008 deployments to Arctic in support of USCG District 17 missions and training
- Currently conducting dockside maintenance in preparation for fall 2009 deployment in support of science

POLAR STAR

- Caretaker status as of summer 2006 (crew reduced to 34 from 134)
- 2009 appropriation provided phase I funding of \$30.3M to reactivate and extend service life 7-10 years.
- Phase II funding of \$32.5M to be determined.



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Future Mission Needs

- Expect energy security, national security, national sovereignty, and a range of Coast Guard statutory missions to be required in the future.
- Polar icebreaker mission analysis in progress – interim final report to be completed following high-latitude study.
- High-latitude study mission analysis (Congressional report) of 11 Coast Guard statutory missions in the Arctic to be completed by end of 2009.
- Both studies expected to inform potential acquisition and planning efforts.



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Budget Authority (BA) – Background and Challenge

- BA for the Coast Guard's polar icebreakers was transferred to NSF in FY06.
- The purpose of the transfer was to better align resources with those who benefit from them (the scientific community).
 - *OMB FY2006 Budget in Brief.*
- Changes in the Arctic and expanding national interests (as reflected in NSPD-66/HSPD-25) have highlighted the need to have multi-mission icebreaking platforms. Those developments have eclipsed the rationale for the original BA transfer.



Budget Authority (BA) – Way Forward

- Congress directed the Coast Guard to renegotiate the existing polar icebreaking agreement with the NSF in order to return the budget for operating and maintaining polar icebreakers to the Coast Guard in FY 2010.
- Joint Explanatory Statement, 2009 Consolidated Security, Disaster Assistance, & Continuing Appropriations Act.
- NSF and Coast Guard are in agreement on major terms for a new MOA and are pursuing a solution.

Questions



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