

Arctic Icebreaker Coordinating Committee (AICC) Report

Bob Campbell

Graduate School of Oceanography

University of Rhode Island

AICC Current Membership

[Aguilar-Islas, Ana](#) UAF 10/15 to 10/18

[Campbell, Robert \(Chair, AICC\)](#) URI 01/16 to 01/19

[Hartz, Steve | \(RVTEC Rep, ex-officio\)](#) UAF 05/07

[Laney, Sam](#) WHOI 10/15 to 10/18

[Lomas, Michael](#) Bigelow Laboratory 08/14 to 08/17

[Persson, Ola](#) CU-Boulder 10/15 to 10/18

[Polashenski, Christopher](#) USACE-CRREL 08/14 to 08/17

[Ruppel, Carolyn](#) USGS 10/15 to 10/18

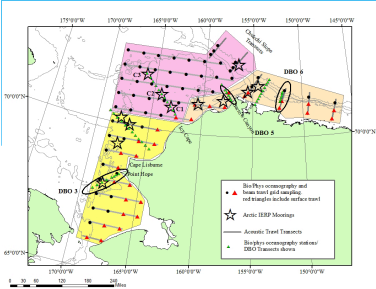
[Russell, Doug | \(RVOC Rep, ex-officio, AICC\)](#) UW 09/13

[Welker, Jeff](#) UAA 10/15 to 10/18

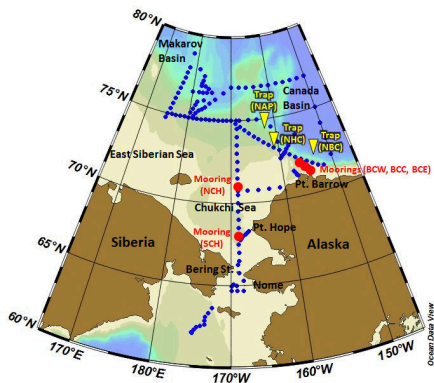
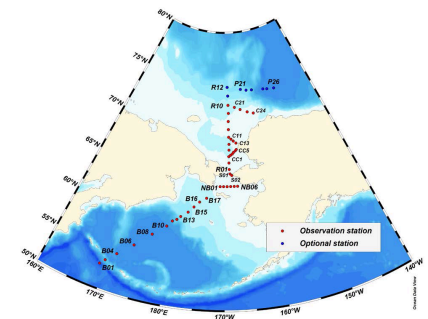
Activities

- * Completed cruise debriefs for HLY1601, 02, and 03
- * Working with STARC to enhance Healy Mapserver capabilities
- * Reviewed and provided comments for AWSC and UAF SOP documents for reducing conflicts between researchers and subsistence hunters
- * Continue to provide Coast Guard with information on science icebreaker needs and mission requirements for new heavy icebreaker
- * AICC Spring Meeting, June 12, 2017 via WebEx Teleconference

2017 Arctic Research Cruise Matrix



- * 24 research cruises in the western Arctic
 - * 4 Healy cruises
 - * 3 Sikuliaq cruises
- * 13 research vessels
 - * 6 foreign research vessels
- * 3 Healy and 4 Sikuliaq cruises scheduled for 2018



Compiled by Dave Forcucci
Healy Marine Science Coordinator

USCGC Healy 2017 Schedule



- * 26 Jul/5 Aug, Chukchi Sea, USCG/Tripp, HLY1701
- * 29 Aug/12 Sep, Chukchi Sea, NOAA/Pickart, HLY1702
- * 22 Sep/10 Oct, Canada Basin, ONR/Worcester, HLY1703
- * Oct/Nov, Beaufort Sea, ONR/Mohsen, HLY1704

R/V Sikuliaq 2017 Schedule



- * 9 Jun/28 Jun, N. Bering/S. Chukchi, NSF/Danielson
- * 30 Jul/23 Aug, Chukchi/Beaufort, NSF/Juranek
- * 25 Aug/18 Sep, Beaufort, NSF/Ashjian

Foreign Vessels



- * Canada, CCGS Sir Wilfrid Laurier, 15-23 Jul, Bering/Chukchi
- * South Korea, RV Araon, 31 Jul/27 Aug, Bering/Chukchi
- * Japan, Oshoro Maru, 23 Jun/27 Jul, Bering/Bering St.
- * Japan, Yushi Maru 2, 8 Jul/21 Sep, Bering
- * Japan, RV Mirai, 20 Jul/2 Oct, Bering/Chukchi/Basin
- * China, Xuelong, 27 Jul/2 Oct, Bering/Chukchi



New Heavy Polar Icebreaker (PIB)

- * Coast Guard accelerates procurement process for new, heavy icebreaker
 - * Request from White House in 2015 to move forward
 - * Accelerate acquisition of replacement heavy icebreaker and planning for additional icebreakers (CG FY17 Budget - \$150M)
 - * High Latitude Study recommends 3 heavy and 3 medium PIBs
 - * Space, power and weight to complete all CG statutory missions, including science
 - * CG awarded 5 contracts worth \$20M for heavy polar icebreaker design and analysis
 - * First icebreaker delivered between 2023 and 2026

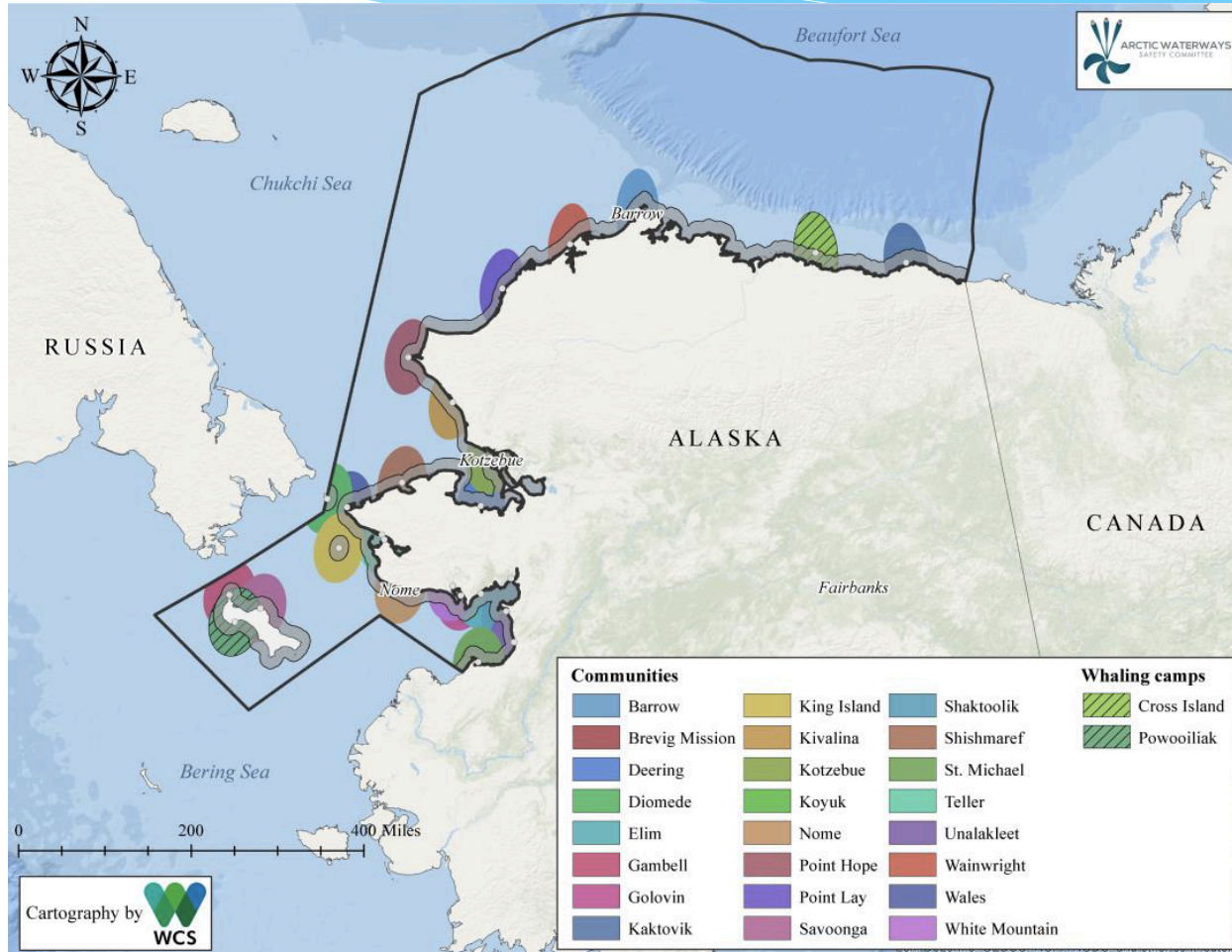
National Academies Polar Icebreaker Cost Assessment Study

- * Final report released July, 2017
 - * 4 findings, 4 recommendations, 8 appendices
- * Recommends the U.S. build four heavy icebreakers
 - * Minimize design, construction, and life-cycle costs
 - * Allow Coast Guard to meet statutory mission needs
- * Recommends that new icebreakers are “science-ready” and one should have full science capability (potentially to replace Healy)
 - * Science ready design includes key elements that cannot be retrofitted cost effectively (flexible accommodation spaces and weight and stability latitudes to allow installation of scientific equipment)
- * National Academies of Sciences, Engineering, and Medicine. 2017. *Acquisition and Operation of Polar Icebreakers: Fulfilling the Nation’s Needs*. Washington, DC: The National Academies Press.
<https://doi.org/10.17226/24834>

Reducing Conflicts Between Research Cruises and Subsistence Activities

- * Arctic Waterways Safety Committee (AWSC)
 - * Co-management orgs., industry, and other groups
 - * Bring users together to define best practices to ensure a safe and predictable operating environment
 - * Standard of Care Document for Research Cruise Operations
- * University of Alaska Fairbanks (UAF)
 - * Community and Environmental Compliance Standard Operating Procedures (CECSOP) for R/V Sikuliaq research operations

Community and Subsistence Activity Locations



Future Activities

- * Debrief Healy 2017 cruises
- * AICC Winter Meeting, January 10 & 11, 2018, US Coast Guard Facility, Seattle, WA