# RUSSIAN FEDERATION ROLE IN RUSALCA

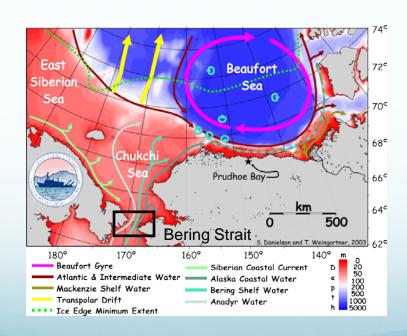


RUSSIAN-AMERICAN LONG-TERM CENSUS OF THE ARCTIC

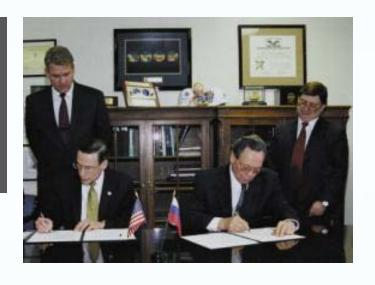
Aleksey Ostrovskiy, Group Alliance, Russia, Russian Federation Oversight for RUSALCA

#### THE MAKING OF RUSALCA

How do Russia and the USA, "THE GATEKEEPERS OF THE PACIFIC GATEWAY TO THE ARCTIC" lead research in the Pacific Arctic



ISSUE: How to Improve Russian - U.S. ocean and polar Region collaboration after a long period



Bringing overarching guidance back into Russian-U.S. scientific collaboration was and is a worthy goal.

Vice-Admiral Lautenbacher (NOAA) and Vice-President Laverov (RAS) sign the Memorandum of Understanding between NOAA and the Russian Academy of Sciences, December, 2003 (World Oceans and Polar Regions Studies).



A major outgrowth of this MOU was the creation of the **Rus**sian, **A**merican **L**ong-term **C**ensus of the **A**rctic (RUSALCA)

### RUSALCA'S GOALS



- Take observations Where Arctic sea ice reduction is a maximum
- 2. Monitor fresh water, heat, nutrient fluxes and transport pathways through the Pacific Gateway.
- 3. Monitor ecosystem indicators of climate change.
- 4. Improve Russian-U.S. Arctic science relations
- 5. Explore the unknown Arctic
- 6. Generate collaborations with other nations under the umbrella leadership of Russia and the USA

#### HOW RUSALCA IS ORGANIZED

RUSSIAN AGENCIES
AND
INSTITUTIONS

(Russian Academy
Of Sciences and
Russian Navy
Leadership)

GROUP ALLIANCE U.S. AGENCIES
AND
INSTITUTIONS
(NOAA
leadership)

## RUSALCA Russian Government Partners

- Russian Academy of Sciences
  - Shirshov Institute of Oceanology
  - Zoological Institute
  - Institute of Microbiology
  - Pacific Oceanological Institute
- Roshydromet
  - AARI
  - FEHRI

- Ministry of Defense
  - Russian Federation Navy
- Ministry of Natural Resources
  - VNIIOkeangeologica
- Ministry of Sciences
- Foreign Ministry

### RUSALCA U.S. PARTNERS

- NSF- Bering Strait Moorings
- NOAA funded (CPO, OER, NMFS)
  - CIFAR- University of Alaska
  - Smithsonian Institution
  - Pt. Stephens Research
  - University of Maryland
  - University of Washington
  - Woods Hole Oceanographic Institution
  - Bermuda Institution of Oceanography

# Structure of the Shipboard Operations

- ROSHYDROMET: Captain, Crew, Scientists
- RUSSIAN FEDERATION NAVY: Chief of Expedition
- RUSALCA MISSION COORDINATORS : K. Crane
   USA M. Zhdanov, A. Ostrovskiy, Russia



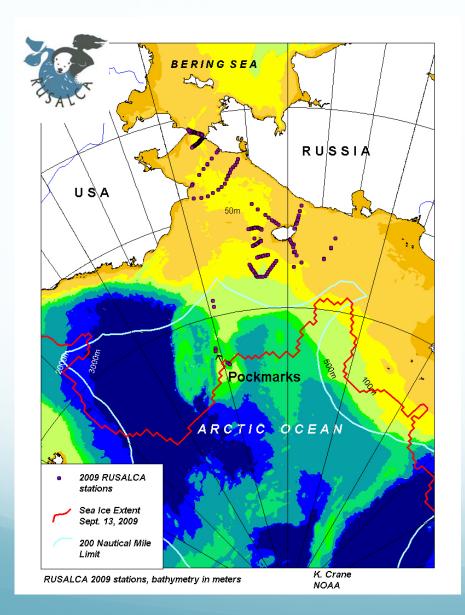
### SCIENTIFIC PARTY



- > 50 Scientists have been funded by their own funding agencies
- Russians to the Russian Academy of Sciences
- US to NOAA's, Arctic Research Program , Ocean Exploration and Research or to NSF

- Most teams have both Russian and American partners The teams are:
  - Ocean Acidification,
  - Benthic and Epibenthic Census and Processes,
  - Census of Zooplankton
  - Biodiversity of Fish and Assessment
  - Nutrients and Productivity
  - Physical and Chemical Oceanography (Bering Strait Fluxes)
  - Paleooceanography, geology and seafloor-ocean fluxes
  - Seafloor permafrost stability
  - Methane
  - Census of Marine Mammals

### 2009 STATION LOCATIONS







Photos Courtesy of A. Ostrovskiy

