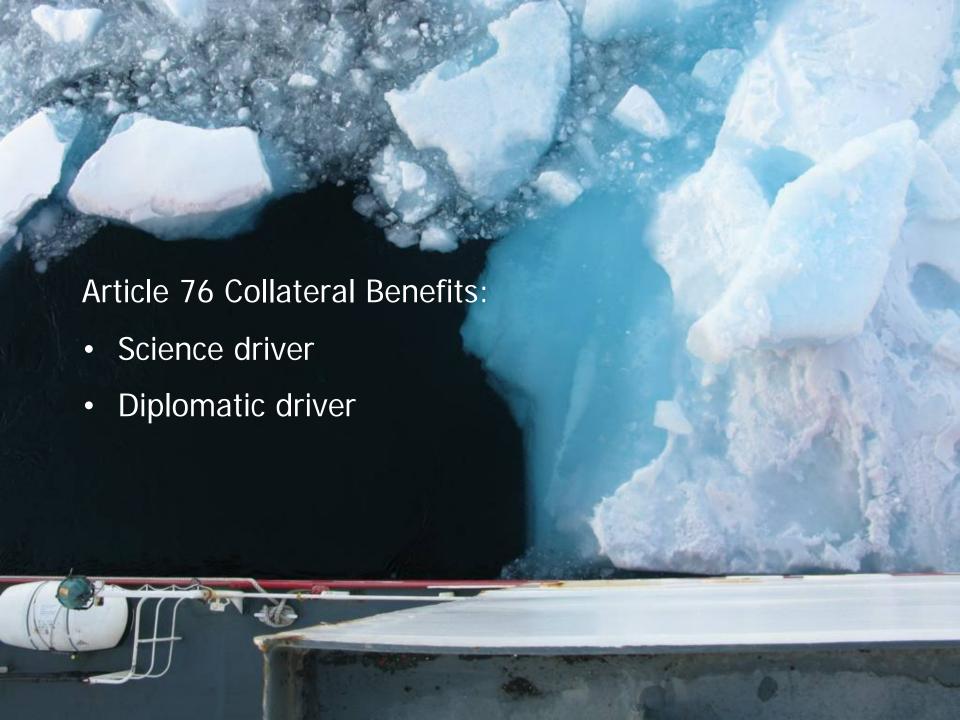


Betsy Baker Vermont Law School

National Ice Center/USARC 3rd Symposium on the Impacts of an Ice-Diminishing Arctic on Naval and Maritime Operations
Annapolis, MD - 11 June 2009

The CCGS Louis S. St.-Laurent breaks ice for the USCGC Healy
Arctic Ocean, September 2008 Photograph courtesy Steve Roberts, UCAR/LDEO
Heli-view courtesy Canadian Coast Guard



### THE ARCTIC OFFSHORE: MARITIME ZONES

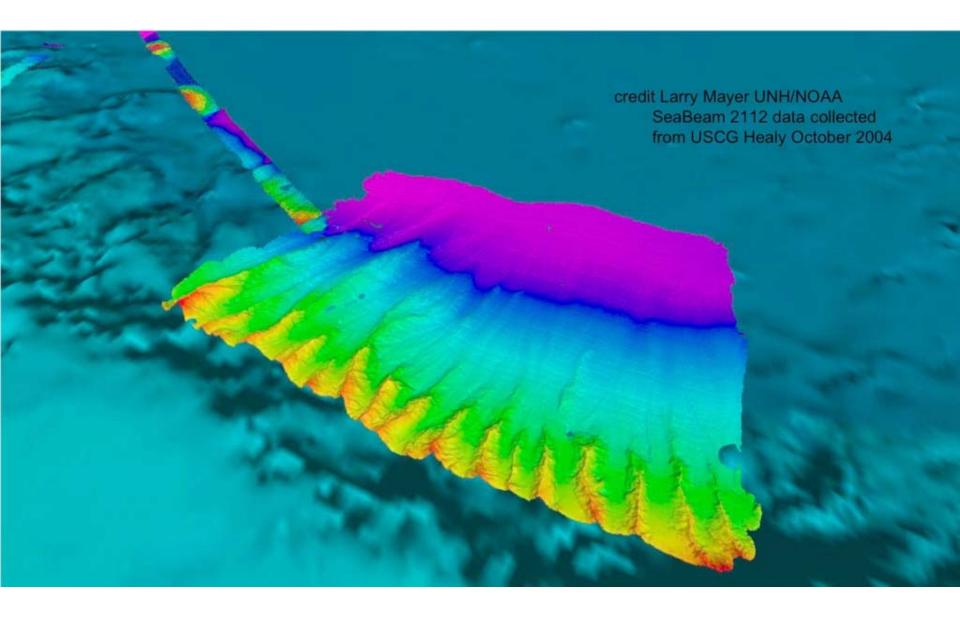


Exclusive Economic

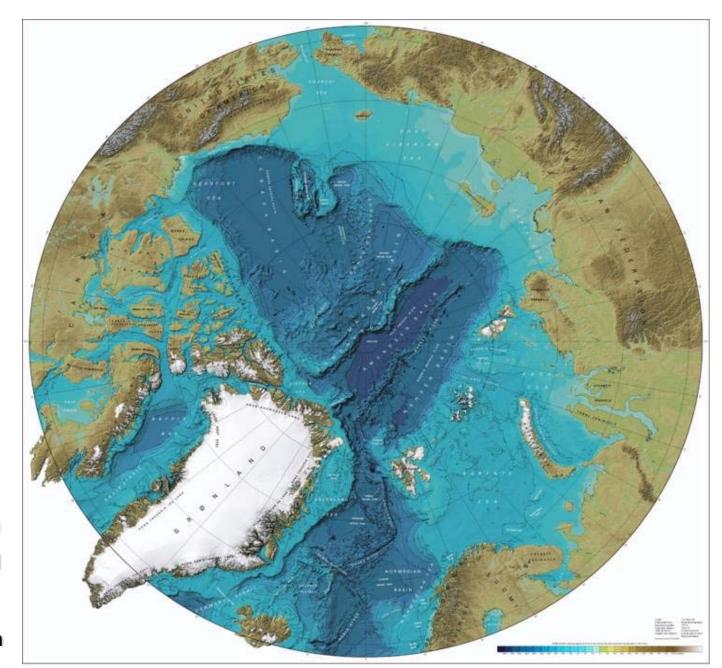
Zones: full coastal state
rights to resources of the
seabed and subsoil

Outer Continental
Shelves: exclusive
sovereign coastal state
rights to explore and
exploit resources of the
seabed and subsoil

The Area: no inherent rights to resources of the seabed and subsoil



Credit: L. Mayer - Canyons in the Beaufort Sea - data collected in ice-free waters, slide B. Coakley



#### IBCAO International Bathymetric

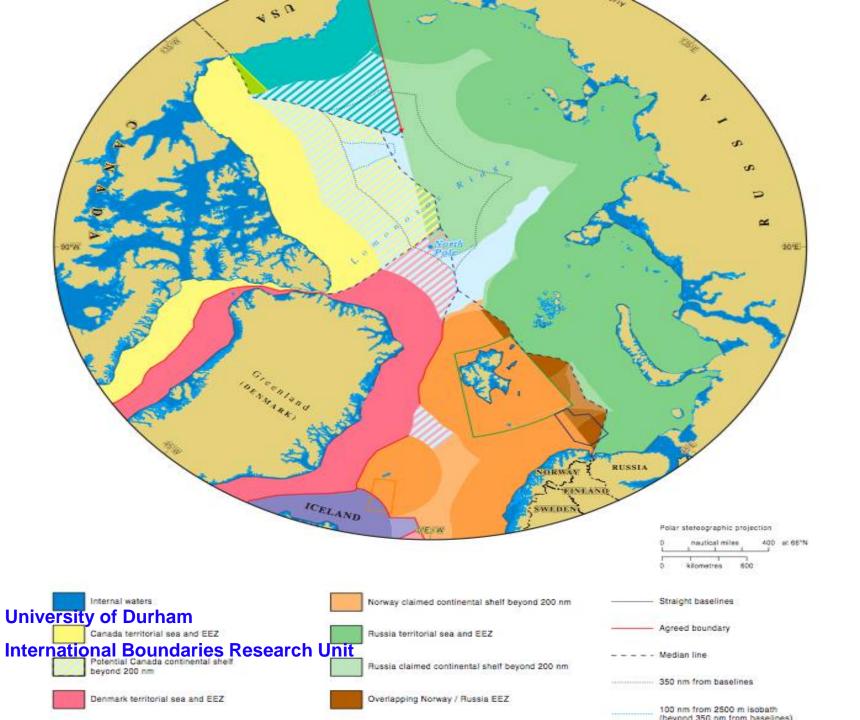
Bathymetric Chart of the Arctic Ocean

## LOS Convention Art. 76(9)

"The provisions of this article are without prejudice to the question of delimitation of the continental shelf between States with opposite or adjacent coasts."

# LOS Convention Art. 83(1)

Delimitation of the continental shelf between States with opposite or adjacent coasts "shall be ... by agreement on the basis of international law,... in order to achieve a equitable solution."

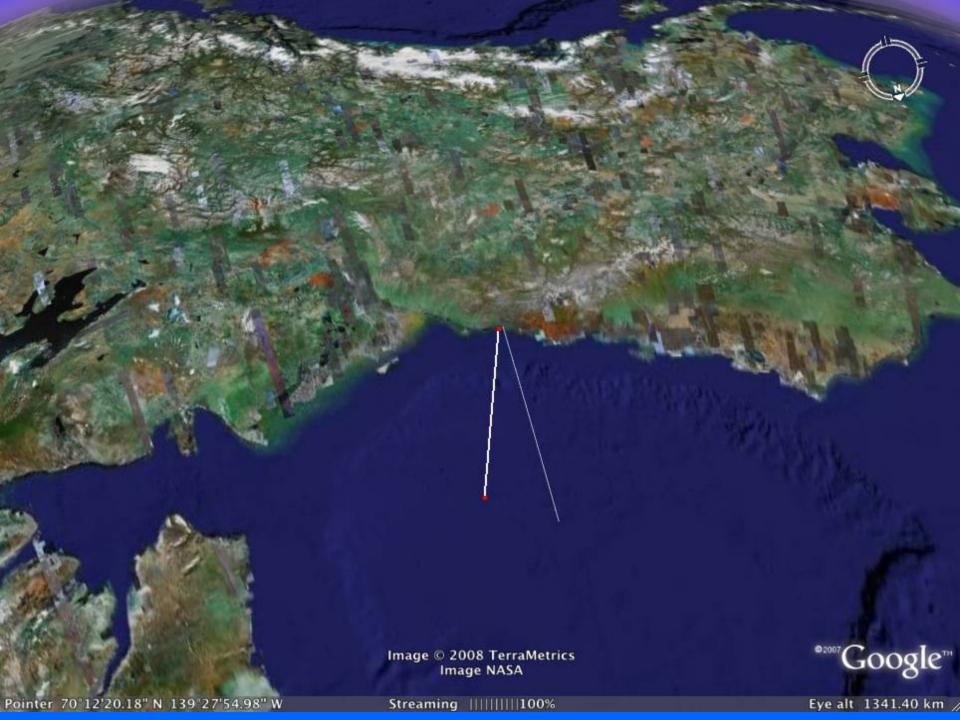


140" 120" 148"W 144" 124" McClure Strait Fishing zone limit International boundary on land ARCTIC OCEAN -72°N Amundsen Gulf BEAUFORT S E ADemarcation Point ALASKA 68'N 144°W 106 132" 1.281 124

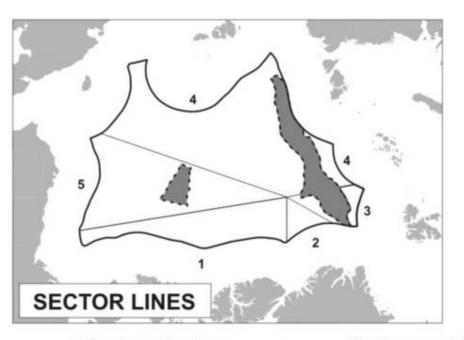
Figure 3: Beaufort Sea

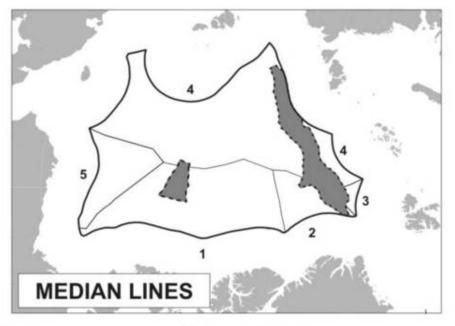
IBRU Boundary and Security Bulletin Autumn 1997 @

David H. Gray, Canada's Unresolved Maritime Boundaries, IBRU Boundary and Security Bulletin, Autumn 1997, p.63



# PARTITIONING THE OUTER CONTINENTAL SHELF IN THE ARCTIC OCEAN: TWO GEOMETRIC APPROACHES





200 nautical miles -

Sector or median lines —

Outer shelf limits -----

Hypothetical partitioning of the Outer Continental Shelves of the five Arctic coastal States: Canada (1), Denmark (2), Norway (3), Russian Federation (4), United States (5)

Credit: Neto/Van de Poll

#### Lack of baseline data in Arctic Ocean

Need for more scientific research and <u>access</u> for research

Joint mapping efforts (and joint submissions?); a foundation for other forms of collaboration

Possibility of a research arrangement for the Arctic Ocean - <u>not</u> a comprehensive treaty

Image NASA
Image © 2008 TerraMetrics
Image © 2008 DigitalGlobe

"Google"



# Marine Scientific Research (MSR) - Hydrographic Surveys?

MSR not defined in LOS Convention

 Hydrographic surveying not explicitly identified as MSR in Part XIII

Clarify by thorough joint mapping of disputed

areas?

