ALASKA STATE LEGISLATURE

Sponsor Statement: SJR 13

SJR 13 urges the United States Senate to ratify the United Nations Convention on the Law of the Seas. Ratification of this treaty will protect American interests related to use and development of the seas off the coast of Alaska, with significant potential benefits to the state of Alaska.

The Law of the Seas was established in 1982 to update outdated laws governing the world's oceans. The Law of the Seas Treaty provides a legal framework for ocean activities including economic development, claim disputes, scientific research, environmental protection, and defense.

Estimates suggest that the Arctic contains 25% of the world's undiscovered oil and gas resources. With high energy prices and a dwindling oil supply, the Arctic offers great potential to meet future energy demands. Of the 155 countries that have ratified the treaty, Russia, Norway, Denmark and Canada have made Arctic claims, giving the United States incentive to do the same.

In 1994 President Bill Clinton signed the treaty; however, the Senate has yet to ratify it, rendering the U.S. the only Arctic nation which hadn't signed. In 2007 President George W. Bush called on the Senate to ratify the treaty, and the Senate Foreign Relations Committee demonstrated overwhelming support with a 17-4 vote. Senators Lisa Murkowski and Mark Begich both favor ratification. Earlier this year, Senator Lisa Murkowski announced her support for ratification, highlighting the great economic potential Alaska's interests. It is likely the United States Senate will vote soon on its ratification.

Recent geological surveys suggest that there could be a seabed extension the size of California that lies beyond Alaska's 200 nautical mile exclusive economic zone. The Law of the Seas Treaty permits countries the right to expand beyond their 200 exclusive economic zone, under certain conditions. If the United States ratifies the Law of the Seas treaty, it is possible the 200 nautical mile exclusive economic zone could be extended.

Without ratification United States will be denied opportunities to make claims as well as participate in future policy decisions.

Background on the Law of the Sea Treaty:

- The Law of the Sea Treaty recognizes countries' sovereign rights over a 200-nautical-mile exclusive economic zone for resource development, exploration, conservation, and energy production.

- Since 1983 the United States has been in voluntary compliance with the Law of the Sea Treaty; however, mere compliance does not allow U.S. participation in treaty processes or protection under treaty terms.

- Member nations may expand their 200-nautical-mile exclusive economic zone if they meet certain provisions, such as proving that their continental seabed extends beyond this area.

- In 1994, amendments were made to this treaty which addressed President Ronald Reagan's concerns regarding deep seabed mining provisions, including a guaranteed position for the U.S. on the International Seabed Authority and elimination of mandatory technology transfers and non-market based controls on levels of mineral production.

- Ratifying the treaty does not weaken U.S. sovereignty; it actually increases it by allowing more jurisdiction over claims and permits the U.S. to participate in policymaking as a member of the International Seabed Authority.

- In 2001, a study conducted by the University of New Hampshire found that the continental shelf off Alaska may permit the U.S. to lay claim to an area approximately the size of California.

- The U.S. is the only Arctic nation that has not ratified the Law of the Sea Treaty. Currently 155 countries worldwide are signatories.

- Ratification supporters include President Bill Clinton, President George W. Bush, President Barack Obama, Senators Lisa Murkowski and Mark Begich, the International Association of Drilling Contractors, the National Fisheries Institute, Former Chairman of the Joint Chiefs of staff General Richard Meyers, the Navy League of the United States, Oceana and others.

- Until the U.S. ratifies the Law of the Seas Treaty, it will remain an observer to the International Seabed Authority, rather than a participant.

Ratifying the Law of the Sea Treaty offers Alaska tremendous benefits associated with an extended exclusive economic zone. If we do not sign, we risk surrendering our interests to other countries.

SENATE JOINT RESOLUTION NO. 13

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-SIXTH LEGISLATURE - FIRST SESSION

BY THE SENATE RESOURCES COMMITTEE

Introduced: 3/13/09
Referred: Resources

A RESOLUTION

1 **Urging the United States Senate to ratify the United Nations Convention on the Law of**
2 **the Sea (the Law of the Sea Treaty).**

3 **BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

4 **WHEREAS**, in August 2007, Russia sent two small submarines into the Arctic Ocean
5 to plant that nation's flag under the North Pole to support its territorial claim that its
6 continental shelf extends to the North Pole; and
7 **WHEREAS** Denmark is exploring whether a mountain range under the Arctic Ocean
8 is connected to Greenland, a territory of Denmark; and
9 **WHEREAS** Canada is considering the establishment of military bases to protect its
10 claim to the Northwest Passage; and
11 **WHEREAS** the actions taken by Russia, Denmark, and Canada have been exercised
12 under the United Nations Convention on the Law of the Sea; and
13 **WHEREAS** the United Nations Convention on the Law of the Sea permits member
14 nations to claim an exclusive economic zone out to 200 nautical miles from shore, with an
15 exclusive sovereign right to explore, manage, and develop all living and nonliving resources,
16 including deep sea mining, within that exclusive economic zone; and

1 **WHEREAS** the United States Arctic Research Commission estimates that the United
2 Nations Convention on the Law of the Sea would permit the United States to lay claim
3 beyond the present 200-mile exclusive economic zone to an area of the northern seabed off
4 Alaska that is equal in size to California; and
5 **WHEREAS** 155 nations have ratified the United Nations Convention on the Law of
6 the Sea, including all allies of the United States and the world's maritime powers; and
7 **WHEREAS** ratification of the current form of the United Nations Convention on the
8 Law of the Sea has been pending before the United States Senate since 1994, and hearings on
9 the treaty were held by the United States Senate Committee on Foreign Relations in 1994,
10 2003, and 2004, and on September 27, 2007, and October 4, 2007; and
11 **WHEREAS**, despite favorable reports by the United States Senate Committee on
12 Foreign Relations regarding the United Nations Convention on the Law of the Sea in 2004
13 and 2007, the United States Senate has yet to vote on the ratification of the Convention; and
14 **WHEREAS** the United States, with 1,000 miles of Arctic coast off of the State of
15 Alaska, remains the only Arctic nation that has not ratified the United Nations Convention on
16 the Law of the Sea; and
17 **WHEREAS**, until the United States Senate votes to ratify the United Nations
18 Convention on the Law of the Sea, the United States may not have the authority to promote its
19 claims to an extended area of the continental shelf, refute the claim of authority by other
20 nations to exercise greater control over the Arctic, or take a permanent seat on the
21 International Seabed Authority Council; and
22 **WHEREAS**, until the United States ratifies the United Nations Convention on the
23 Law of the Sea, the United States cannot participate in deliberations to amend provisions of
24 the Convention that relate to the
25 (1) oil, gas, and mineral resources in the Arctic Ocean and other northern
26 waters;
27 (2) conduct of essential scientific research in the world's oceans;
28 (3) right of the United States to the use of the seas;
29 (4) rules of navigation;
30 (5) effect of the use of the seas on world economic development; and
31 (6) environmental concerns related to the use of the seas; and

1 **WHEREAS** the United Nations Convention on the Law of the Sea will have an
2 important and beneficial effect on virtually all states, both coastal and noncoastal, because the
3 United States is heavily dependent on the use, development, and conservation of the world's
4 oceans and their resources; and
5 **WHEREAS** the United Nations Convention on the Law of the Sea will not interfere
6 with the intelligence-gathering efforts of the United States or the navigational freedom of the
7 United States Navy; and
8 **WHEREAS** ratification of the United Nations Convention on the Law of the Sea has
9 wide bipartisan support;
10 **BE IT RESOLVED** that the Alaska State Legislature urges the United States Senate
11 to ratify the United Nations Convention on the Law of the Sea.
12 **COPIES** of this resolution shall be sent to the Honorable Joseph R. Biden, Jr., Vice-
13 President of the United States and President of the U.S. Senate; the Honorable John F. Kerry,
14 Chair of the U.S. Senate Committee on Foreign Relations; the Honorable Richard G. Lugar,
15 ranking Republican on the U.S. Senate Committee on Foreign Relations; the Honorable Lisa
16 Murkowski, and the Honorable Mark Begich, U.S. Senators, members of the Alaska
17 delegation in Congress; and all other members of the United States Senate.

Myths and Realities of the Convention on the Law of the Sea

Taken from the written testimony of John D. Negroponte, Deputy Secretary of State, before the Senate Foreign Relations Committee, 9/27/2007

Certain arguments against U.S. accession are simply inaccurate. And other arguments are outdated, in the sense that they may have been true before the deep seabed mining provisions were fixed and thus are no longer true. I would like to address some of these "myths" surrounding the Convention:

Myth: Joining the Convention would surrender U.S. sovereignty.

Reality: On the contrary. Some have called the Convention a "U.S. land grab." It expands U.S. sovereignty and sovereign rights over extensive maritime territory and natural resources off its coast, as described earlier in my testimony. It is rare that a treaty actually increases the area over which a country exercises sovereign rights, but this treaty does. The Convention does not harm U.S. sovereignty in any respect. As sought by the United States, the dispute resolution mechanisms provide appropriate flexibility in terms of both the forum and the exclusion of sensitive subject matter. The deep seabed mining provisions do not apply to any areas in which the United States has sovereignty or sovereign rights; further, these rules will facilitate mining activities by U.S. companies. And the navigational provisions affirm the freedoms that are important to the worldwide mobility of U.S. military and commercial vessels.

Myth: The Convention is a "UN" treaty and therefore does not serve our interests.

Reality: The Convention is not the United Nations - it was merely negotiated there, as are many agreements, and negotiated by States, not by UN bureaucrats. Further, just because a treaty was drawn up at the UN does not mean it does not serve our interests. For example, the United States benefits from UN treaties such as the Convention Against Corruption and the Convention for the Suppression of Terrorist Bombings. The Law of the Sea Convention is another such treaty that serves U.S. interests.

Myth: The International Seabed Authority (ISA) has the power to regulate seven-tenths of the Earth's surface.

Reality: The Convention addresses seven-tenths of the earth's surface; the ISA does not. First, the ISA does not address activities in the water column, such as navigation. Second, the ISA has nothing to do with the ocean floor that is

subject to the sovereignty or sovereign rights of any country, including that of the United States. Third, the ISA only addresses deep seabed mining. Thus, its role is limited to mining activities in areas of the ocean floor beyond national jurisdiction. It has no other role and no general authority over the uses of the oceans, including freedom of navigation and overflight.

Myth: The Convention gives the UN its first opportunity to levy taxes.

Reality: Although the Convention was negotiated under UN auspices, it is separate from the UN and its institutions are not UN bodies. Further, there are no taxes of any kind on individuals or corporations or others. Concerning oil/gas production within 200 nautical miles of shore, the United States gets exclusive sovereign rights to seabed resources within the largest such area in the world. There are no finance-related requirements in the EEZ. Concerning oil/gas production beyond 200 nautical miles of shore, the United States is one of a group of countries potentially entitled to extensive continental shelf beyond its EEZ. Countries that benefit from an Extended Continental Shelf have no requirements for the first five years of production at a site; in the sixth year of production, they are to make payments equal to 1% of production, increasing by 1% a year until capped at 7% in the twelfth year of production. If the United States were to pay royalties, it would be because U.S. oil and gas companies are engaged in successful production beyond 200 nautical miles. But if the United States does not become a party, U.S. companies will likely not be willing or able to engage in oil/gas activities in such areas, as I explained earlier.

Concerning mineral activities in the deep seabed, which is beyond U.S. jurisdiction, an interested company would pay an application fee for the administrative expenses of processing the application. Any amount that did not get used for processing the application would be returned to the applicant. The Convention does not set forth any royalty requirements for production; the United States would need to agree to establish any such requirements.

In no event would any payments go to the UN, but rather would be distributed to countries in accordance with a formula to which the United States would have to agree.

Myth: The Convention would permit an international tribunal to second-guess the U.S. Navy.

Reality: No international tribunal would have jurisdiction over the U.S. Navy. U.S. military activities, including those of the U.S. Navy, would not be subject to any form of dispute resolution. The Convention expressly permits a party to

exclude from dispute settlement those disputes that concern "military activities." The United States will have the exclusive right to determine what constitutes a military activity.

Myth: The International Tribunal for the Law of the Sea could order the release of a vessel apprehended by the U.S. military.

Reality: The Tribunal has no jurisdiction to order release in such a case. Its authority to address the prompt release of vessels applies only to two types of cases: fishing and protection of the marine environment. Further, even if its mandate did extend further - which it does not - the United States will be taking advantage of the optional exclusion of military activities from dispute settlement. As such, in no event would the Tribunal have any authority to direct the release of a vessel apprehended by the U.S. military.

Myth: The Convention was drafted before - and without regard to - the war on terror and what the United States must do to wage it successfully.

Reality: The Convention enhances, rather than undermines, our ability to wage the war on terror. Maximum maritime naval and air mobility is essential for our military forces to operate effectively. The Convention provides the necessary stability and framework for our forces, weapons, and materiel to get to the fight without hindrance. It is essential that key sea and air lanes remain open as a matter of international legal right and not be contingent upon approval from nations along those routes. The senior U.S. military leadership - the Joint Chiefs of Staff - has recently confirmed the continuing importance of U.S. accession to the Convention in a letter to the Committee.

Myth: The Convention would prohibit or impair U.S. intelligence and submarine activities.

Reality: The Convention does not prohibit or impair intelligence or submarine activities. Joining the Convention would not affect the conduct of intelligence activities in any way. This issue was the subject of extensive hearings in 2004 before the Senate Select Committee on Intelligence. Witnesses from Defense, CIA, and State all confirmed that U.S. intelligence and submarine activities are not adversely affected by the Convention. We follow the navigational provisions of the Convention today and are not adversely affected; similarly, we would not be adversely affected by joining.

Myth: The United States can rely on use or threat of force to protect its navigational interests fully.

Reality: The United States has utilized diplomatic and operational challenges to resist the excessive maritime claims of other countries that interfere with U.S. navigational rights. But these operations entail a certain degree of risk, as well as resources. Being a party to the Convention would significantly enhance our efforts to roll back these claims by, among other things, putting the United States in a stronger position to assert our rights.

Myth: Joining the Convention would hurt U.S. maritime interdiction efforts under the Proliferation Security Initiative (PSI).

Reality: Joining the Convention would not affect applicable maritime law or policy regarding the interdiction of weapons of mass destruction. PSI specifically requires participating countries to act consistent with international law, which includes the law reflected in the Convention. Almost all PSI partners are parties to the Convention. Further, joining the Convention is likely to strengthen PSI by attracting new cooperative partners.

Myth: President Reagan thought the treaty was irremediably defective.

Reality: As explained above, President Reagan identified only certain deep seabed mining provisions of the Convention as flawed. His 1983 Ocean Policy Statement demonstrates that he embraced the non-deep-seabed provisions and established them as official U.S. policy. The 1994 Agreement overcomes each of the objections to the deep seabed mining provisions identified by President Reagan. As President Reagan's Secretary of State, George P. Shultz, noted in his recent letter to Senator Lugar, "It surprises me to learn that opponents of the treaty are invoking President Reagan's name, arguing that he would have opposed ratification despite having succeeded on the deep sea-bed issue. During his administration, with full clearance and support from President Reagan, we made it very clear that we would support ratification if our position on the sea-bed issue were accepted."

Myth: The Convention provides for mandatory technology transfer.

Reality: Mandatory technology transfer was eliminated by the 1994 Agreement that modified the original Convention.

Myth: The United States could and should renegotiate a new law of the sea agreement, confined to the provisions on navigational freedoms.

Reality: Assuming, for the sake of argument, that this were a desirable outcome, other countries would have no reason or incentive to enter into such a negotiation. The Convention is widely accepted, having been joined by over

150 parties including all other major maritime powers and most other industrialized nations. Those parties are generally satisfied with the entirety of the treaty and would be unwilling to sacrifice other provisions of the Convention, such as benefits associated with exclusive economic zones and sovereign rights over the resources they contain, as well as continental shelves out to 200 nautical miles and in some cases far beyond. And parties that would like to impose new constraints on our navigational freedoms certainly would not accept the 1982 version of those freedoms.

http://www.betterworldcampaign.org/issues/international-security/law-of-the-sea-treaty.html

Stakeholder Endorsements of US Accession to the UN Convention on the Law of the Sea and the 1994 Agreement on Implementation

Endorsements categorized as follows:

- Obama Administration
- Bush Administration
- Current Military Service Chiefs and Legal Advisers(9)
- Former Secretaries of State (8)
- Other Former Cabinet and Sub-Cabinet Officers (12)
- Former UN Representatives and Ambassadors (5)
- Former National Security Advisors (4)
- Former EPA Administrators (4)
- Former Senators (6)
- State and City Officials (14)
- Business and Industry (20)
- Oceans and Environmental Organizations (21)
- Academia (25)
- Joint Ocean Commissions Initiative (3)
- Research and Science Organizations (7)
- International Affairs (4)
- Legal Societies and Organizations (5)
- Chairmen of the Joint Chiefs of Staff (7)
- Chiefs of Naval Operations (11)
- Commandants of the US Coast Guard (5)
- Additional Retired Navy and Coast Guard (12)
- Legal Advisers of the Department of State (10)
- Church Support (4)
- Other (31)

(Endorsements as contained in letters, commentary articles, letters to the editor and testimony)

Obama Administration

Barack Obama
President-Elect of the United States

Joseph Biden
Vice-President of the United States

Hillary Clinton
Secretary of State

Bush Administration

George W. Bush
President of the United States

Stephen Hadley,
National Security Advisor

James L. Connaughton
Director, Council on Environmental Quality

Condoleezza Rice
Secretary of State

Carlos Gutierrez
Secretary of Commerce

Dirk Kempthorne
Secretary of the Interior

Michael Chertoff
Secretary of Homeland Security

John Negroponte
Deputy Secretary of State

Gordon England
Deputy Secretary of Defense

Donald C. Winter
Secretary of the Navy

VAdm. Conrad Lautenbacher, USN (ret.)
Under Secretary of Commerce for Oceans and Atmosphere & Administrator of NOAA

John Bellinger
Legal Adviser, Dept. of State

Joseph A. Benkert
Assistant Secretary (nominee)
Global Security Affairs
Department of Defense

Current Military Service Chiefs and Legal Advisors

Adm. Mike Mullen
Chairman, Joint Chiefs of Staff

Adm. Gary Roughead
Chief of Naval Operations

Gen. James T. Conway
Commandant of the Marine Corps

Gen. George W. Casey
Chief of Staff of the Army

Gen. T. Michael Moseley
Chief of Staff of the Air Force

Adm. Thad Allen
Commandant of the US Coast Guard

Adm. Patrick Walsh
Vice Chief of Naval Operations

RAdm. McDonald
Judge Advocate General
U.S. Navy

RAdm, William D. Baumgarter
Judge Advocate General
U.S. Coast Guard

Former Secretaries of State

Condoleezza Rice
former Secretary of State

Colin Powell
former Secretary of State
former Chairman, JCS

Madeline Albright
Former Secretary of State
former US Representative to the United Nations
Chairman, Board of Directors
The Democratic Institute for International Affairs

Warren Christopher
former Secretary of State

James A. Baker, III
Former Secretary of State
Senior Partner, Baker Botts, LLP

Larry Eagleberger
former Secretary of State

George P. Shultz
former Secretary of State

Alexander M. Haig, Jr.
Former Secretary of State
Chairman, Worldwide Associates, Inc.

Other Former Cabinet and Sub-Cabinet Officers

Melvin R. Laird
Former Secretary of Defense

Michael Kantor
Former Secretary of Commerce

Donald L. Evans
Former Secretary of Commerce

Carla A. Hills
Former U.S. Trade Representative
Chairman and CEO, Hills & Company

Richard Armitage
former Deputy Secretary of State

William Taft, IV
former Deputy Secretary of Defense
former Legal Adviser, Dept. of State

Strobe Talbott
President, Brookings Institution
former Deputy Secretary of State

John C. Whitehead
former Deputy Secretary of State
former Chairman, Goldman Sachs

Sean O'Keefe
Former Secretary of the Navy
Chancellor, Louisiana State University

Antonia Chayes
former Under Secretary of the Air Force
Visiting Professor of International Politics & Law
Tufts University

D. James Baker
former Under Secretary of Commerce for Ocean Affairs and Administrator, National Oceanic and Atmospheric Administration
Director, Global Carbon Measurement Program
The William J. Clinton Foundation

John Knauss
former Under Secretary of Commerce for Ocean Affairs and Administrator, National Oceanic and Atmospheric Administration

John V. Byrne
former Administrator, National Oceanic and Atmospheric Administration

Former Ambassadors and UN Representatives

Amb. Kenneth Adelman
Director, US Arms Control Agency

John C. Danforth
former Senator
former US Representative to the United Nations
Bryan Cave LLP

Amb. Thomas Graham, Jr.
former General Counsel,
Arms Control and DIsarmament Agency and
former Special Representative of the President of the United States for Arms Control, Non-Proliferation, and Disarmament,

Thomas R. Pickering
Former Under Secretary for Public Affairs
former US Representative to the United Nations
U.S. Department of State
Vice Chairman, Hills & Company

see also: Madeline Albright, former Secretary of State and US Representative. to the UN

National Security Advisors

Stephen Hadley
National Security Advisor to President George W. Bush

Robert C. McFarlane
National Security Advisor
to President Ronald Reagan

Colin Powell
National Security Advisor
to President George H.W. Bush

see also, Condoleezza Rice (2001-2004)

Former EPA Administrators

William D. Ruckelshaus
Strategic Director
Madrona Venture Group

William K. Reilly
Former EPA Administrator
Chairman Emeritus, World Wildlife Fund

Russell E. Train
Chairman Emeritus
World Wildlife Fund

Christine Todd Whitman
Whitman Strategy Group

Former Senators

Senator John B. Breaux (D-LA)
Senior Counsel
Patton Boggs LLP

Ernest Hollings (D-SC)

Senator George J. Mitchell
Chairman
DLA Piper

Senator Sam Nunn
D-GA

Senator Tim Wirth
President UN Foundation

see also, Senator John Danforth (R-MO), former US Representative to the UN

State and City Officials

Governor Sarah Palin
State of Alaska

Governor Arnold Schwarzenegger
State of California

Governor Ruth Ann Minner
State of Delaware

Governor Linda Lingle
State of Hawaii

Governor John Baldacci
State of Maine

Governor Ted Kulongoski
State of Oregon

Governor Donald Carcieri
State of Rhode Island

Governor Christine Gregoire
State of Washington

Governor Felix Camacho
Territory of Guam

Tony Knowles
Former Governor of Alaska

George E. Pataki
former Governor, New York

Mike Hayden
Secretary
Kansas Department of Wildlife and Parks

Joseph P. Riley, Jr.
Mayor of Charleston

Lillian C. Borrone
Former Assistant Executive Director
Port Authority of New York and New Jersey

Business and Industry

Clarence P. Cazalot, Jr.
President and CEO
Marathon Oil Corporation

Red Cavaney
President and CEO
American Petroleum Institute

John Connelly
President
National Fisheries Institute

Joseph J. Cox
President and CEO
Chamber of Shipping of America

Thomas Dammrich
President
National Marine Manufacturers Association

Lawrence R. Dickerson
President and CEO
Diamond Offshore Drilling, Inc.

Thomas Fry
President
National Ocean Industries Association

James C. Greenwood
President and CEO
Biotechnology Industry Organization

General Jim Jones
President and CEO
Institute for 21st Century Energy
US Chamber of Commerce
former Supreme Allied Commander Europe

R. Bruce Josten
Executive Vice President, Government Affairs
Chamber of Commerce
of the United States of America

Paul L. Kelly
Kelly Energy Consultants

Christopher L. Koch
President and CEO
World Shipping Council

Daniel F. McNease
Chairman & CEO
Rowan Companies, Inc.

James J. Mulva
Chairman and CEO
ConocoPhillips

Mike Nussman
President and CEO
American Sportfishing Association

Brian T. Petty
Senior Vice President
International Association of Drilling Contractors

Peter J. Robertson
Vice Chairman of the Board
Chevron Corporation

Barry Russell
President
Independent Petroleum Association of America

Richard Schwartz
Chairman and Founder
Boat Owners Association of the United States

Deborah C. Trefts
President and Managing Member
Aquatic Stewards Consulting Group, LLC

Oceans and Environmental Organizations

John Adams
Co-Founder
Natural Resources Defense Council

Bruce Babbitt
Former Secretary of the Interior
Chairman, Board of Directors, World Wildlife Fund

Ted A. Beattie
President and CEO
John G. Shedd Aquarium

Frances Beinecke
President
Natural Resources Defense Council

John F. Calvelli
Senior Vice President for Public Affairs
Wilderness Conservation Society

Sarah Chassis
Natural Resources Defense Council

Phil Clapp
President
National Environmental Trust

Eileen Claussen
President and Chair of the Board
Pew Center on Global Climate Change

John Englander
CEO
International Seakeepers Society

Patricia Forkan
President
Humane Society International

Scott A. Hajost
Executive Director
IUCN-US

Robert Irvin
Senior Vice President for Conservation Programs
Defenders of Wildlife

Daniel B. McGraw, Jr.
President
Center for International Environmental Law

Steven J. McCormick
President and CEO
The Nature Conservancy

Elliot Norse
President
Marine Conservation Biology Institute

Julie Packard
Executive Director
Monterey Bay Aquarium

Pietro Parravano
President
Institute for Fisheries Resources

Jimmie Powell
Director of Government Relations
The Nature Conservancy

Joshua S. Reichert
Managing Director, Pew Environmental Group
The Pew Charitable Trusts

Carter S. Roberts
President and CEO
World Wildlife Fund

Andrew Sharpless
CEO
Oceana

Vikki N. Spruill
President and CEO
Ocean Conservancy

Academia

Craig Allen
School of Law
University of Washington

Anthony Clark Arend
Professor of Government and Foreign Service
Director, Institute for International Law & Politics
Georgetown University

Robert D. Ballard
Professor, Graduate School of Oceanography
University of Rhode Island

David Bederman
Professor of Law
Emory University

Martin Belsky
Dean, School of Law
University of Akron
former Assistant Administrator for Policy,
National Oceanic and Atmospheric
Administration

David D. Caron
Co-Director, Law of the Sea Institute
University of California, Berkley

James M. Coleman
Boyd Professor, Coastal Studies Institute
Louisiana State University

Barry Hart Dubner
Professor, Dwayne O. Andreas School of Law
Barry University

Tony Haymet
Director
Scripps Institution of Oceanography

Marc J. Hershman
Professor, School of Marine Affairs
University of Washington

Christopher C. Joyner
Director, Institute for International Law and
Politics
Professor of Government and Foreign Service
Georgetown University

Kristen Juras
University of Montana School of Law
Missoula, MT

Charles Kennel
Founding Director, Environment and
Sustainability
Initiative, Scripps Institution of Oceanography

Jane Lubchenco
Wayne and Gladys Valley Professor of Marine
Biology, Department of Zoology
Oregon State University

James R. Luyten
Acting President and Director
Woods Hole Oceanographic Institution

Larry A. Mayer
Professor and Director
Center for Coastal and Ocean Mapping/NOAA-
UNH Joint Hydrographic Center
University of New Hampshire

Edward Miles
School of Marine Affairs
University of Washington

Frank E. Muller-Karger
Dean, School for Marine Science and Technology
University of Massachusetts Dartmouth

John Norton Moore
Director, Center for Oceans Law and Policy
University of Virginia School of Law

Dennis W. Nixon
Professor of Marine Affairs and
Associate Dean for Academic Affairs
University of Rhode Island

Myron Nordquist
Associate Director
Center for Oceans Law and Policy
University of Virginia
former Acting General Counsel,
Department of the Air Force

John Noyes
California Western School of Law
San Diego, California

Professor Bernard Oxman
School of Law
University of Miami

Andrew A. Rosenberg
Professor, Department of Natural Resources and
Institute for the Study of Earth, Ocean, and Space
University of New Hampshire

Harry N. Scheiber
Co-Director, Law of the Sea Institute
University of California, Berkley

Joint Ocean Commissions Initiative

James D. Watkins
Admiral, U.S. Navy (Retired)
Chairman, U.S. Commission on Ocean Policy
Co-Chair, Joint Ocean Commission Initiative

The Honorable Leon E. Panetta
Chair, Pew Oceans Commission
Co-Chair, Joint Ocean Commission Initiative

Ann D'Amato
Commissioner
U.S. Commission on Ocean Policy

Research and Science Organizations

Robert R. Furgason
Director
Harte Research Institute for Gulf of Mexico Studies

Jack N. Gerard
President and CEO
American Chemistry Council

Donald Kennedy
Editor in Chief, Science Magazine, American Association for the Advancement of Science

P. Patrick Leahy
Executive Director
American Geological Institute

Paul A. Sandifer
Senior Scientist, National Ocean Service
National Oceanic and Atmospheric Administration

A.F. Spilhaus, Jr.
Executive Director
American Geophysical Union

Richard D. West
Rear Admiral, U.S. Navy (Retired)
President, Consortium for Oceanographic Research and Education

International Affairs

Charles J. Brown
President and CEO
Citizens for Global Solutions

Lee Hamilton
President and Director
Woodrow Wilson International Center for Scholars

John Temple Swing
President Emeritus
Foreign Policy Association

Timothy E. Wirth
former Senator
President
United Nations Foundation and Better World Fund

Legal Societies and Organizations

Lizabeth L. Burrell
President
Maritime Law Association

William H. Neukom
President
American Bar Association

Bettina B. Plevan
President
Association of the Bar of New York City

Margaret Tomlinson
Law of the Sea Committee
American Bar Association

Caitlyn Antrim
Executive Director
Rule of Law Committee for the Oceans

Chairmen of the Joint Chiefs of Staff

Admiral Mike Mullen, US Navy
General Peter Pace, USMC
General Richard Myers, USAF
General Henry H. Shelton, USAF
General Colin Powell, US Army
Admiral William Crowe, US Navy

Chiefs of Naval Operations

Admiral Gary Roughead (current)
Admiral Mike Mullen (now Chairman, JCS)
Admiral Vern Clark
Admiral Jay Johnson
Admiral Frank Kelso
Admiral C. A. H. Trost

Admiral James D. Watkins
Admiral T. B. Hayward
Admiral J. L. Holloway
Admiral Elmo R. Zumwalt
Admiral Thomas E. Moorer

Commandants of the US Coast Guard

Admiral Thad Allen, USCG
Admiral Thomas Collins, USCG (Ret.)
Admiral James M. Loy, USCG (Ret.)
Admiral Robert E. Kramek, USCG (Ret.)
Admiral Paul Yost, USCG (Ret.)

Legal Advisers of the Department of State

John Bellinger (2005-2009)
William H. Taft IV (2001-2005)
David R. Andrews (1997-2000)
Conrad K. Harper (1993-1996)
Edwin D. Williamson (1990-1993)
Abraham D. Sofar (1985-1990)
Davis R, Robinson (1981-1985)
Roberts B. Owen (1979-1981)
Herbert L, Hansell (1977-1979)
Michael J. Matheson, acting Legal Advisor on multiple occasions

Church Support

United Methodist Church
American Baptist Church
Friends Committee for National Legislation
Unitarian Universalists

Additional Retired Navy and Coast Guard

Admiral Joseph W. Prueher
U.S. Navy (Retired)

Vice Admiral James Doyle
U.S. Navy (Retired)

RAdm William L. Schachte, Jr.
U.S. Navy, JAGC (Retired)

RAdm James McPherson
U.S. Navy, JAGC (Retired)

RAdm William O. Miller
US Navy JAGC (Retired)

RAdm James Lohr
U.S. Navy, JAGC (Retired)

RAdm Horace Robertson
US Navy, JAGC (Retired)

Vice Admiral Roger T. Rufe, Jr.
U.S. Coast Guard (Retired)

Rear Admiral John W. Lockwood
U.S. Coast Guard (Retired)

Vice Admiral Paul G. Gaffney II
U.S. Navy (Retired)

RAdm Rick Schiff
US Navy, JAGC (Retired)

Captain George Galdorisi, USN (Retired)

Other

David M. Abshire
President
Center for the Study of the Presidency

Richard Blaustein
Attorney
Washington, DC

Samuel A. Bleicher
Principal, The Strategic Path LLC
former Deputy General Counsel, NOAA

Joan Bondareff
Blank Rome, LLC
Washington, DC

Scott Borgerson
Fellow
Council on Foreign Relations

William Brewer
former General Counsel
National Oceanic and Atmospheric Administration

Walter Cronkite
CBS

Clifton Curtis
Director, The Varda Group
Washington, D.C.

Edward Dangler, Esq.,
Proctor in Admiralty
Lincoln Law School
San Jose, CA

Sylvia Earle
President, Deep Search International
Chairman, Deep ocean Exploration
National Geographic Explorer-in-Residence

Benjamin H. Friedman
Research Fellow
Cato Institute

Eldon Greenberg
partner, Garvey Schubert Barer
former General Counsel, National Oceanic and Atmospheric Administration

Rev,Theodore Hesburgh
former President
Notre Dame University

Montserrat Gorina-Ysern
Founder and Director
Healthy Children-Healthy Oceans Foundation
formerly law lecturer/adjunct law professor at
Australia-US universities

Carlotta Leon Guerrero
Executive Director
Ayuda Foundation

Lee A. Kimball
former Executive Director
Council on Ocean Law

Thomas R. Kitsos
former Executive Director
U.S. Commission on Ocean Policy

Jeffrey Laurenti
New York, NY

Terry L. Leitzell
former Assistant Administrator for Fisheries
National Oceanic and Atmospheric
Administration

Sheila M. McNeill
Past President
Navy League of the United States

Robert McManus
former General Counsel
National Oceanic and Atmospheric
Administration

Shelia M. McNeill
former President
Navy League of the United States

John T. Oliver
Adjunct Professor
Georgetown Law School

David Rockefeller, Jr.
New York, NY

Lisle Rose
Historian

Paul Saffo
Technology Forecaster

Wesley S. Scholz
Washington, DC

Scott Truver
Executive Advisor
National Security Programs
Gryphon Technologies LC

Mary Turnipseed
Graduate Student in Ecology
Duke University
Nicholas School of the Environment
Durham, N.C.

James 'Bud' Walsh
former Deputy Administrator
National Oceanic and Atmospheric
Administration

Mary Beth West
former Deputy Assistant Secretary of State for
Oceans and Fisheries

Patten D. White
CEO, Maine Lobstermen's Association

U.S. Extended Continental Shelf Project

Since 2001, the United States has been engaged in gathering and analyzing data to determine the outer limits of its extended continental shelf (ECS). Under the Convention on the Law of the Sea, every coastal State has a continental shelf out to 200 nautical miles from its coastal baselines (or out to a maritime boundary with another coastal State), and beyond that distance if certain criteria are met. Article 76 of the Convention sets forth the criteria upon which a coastal State may determine a continental shelf that extends beyond 200 nautical miles. The ECS is that portion of the continental shelf that lies beyond this 200 nautical mile limit. Beginning in 2007 the effort to delimit the U.S. ECS became the Extended Continental Shelf Project, directed by an interagency task force.

Defining the U.S. Extended Continental Shelf

The process to determine the outer limits of a State's ECS requires the collection and analysis of data that describe the depth, shape, and geophysical characteristics of the seabed and sub-sea floor. Particularly important is bathymetric and sediment thickness data.

The U.S. Extended Continental Shelf Task Force, an interagency body headed by the U.S. Department of State, coordinates the work to define the limits of the U.S. continental shelf. Participants in this Task Force include: State Department, NOAA (National Oceanic and Atmospheric Administration), the U.S. Geological Survey, the Executive Office of the President, the Joint Chiefs of Staff, the U.S. Navy, the U.S. Coast Guard, the Department of Energy, the National Science Foundation, the Environmental Protection Agency, the Minerals Management Service, and the Arctic Research Commission.

Why define the U.S. extended continental shelf?

A coastal State can exercise certain sovereign rights over its continental shelf, including: exploration, exploitation, conservation, and management of non-living resources of the seabed and subsoil of the continental shelf, such as ferromanganese crusts, ferromanganese nodules, gas hydrate deposits, and petroleum; and exploration,

exploitation, conservation, and management of living, "sedentary" resources, such as clams, crabs, scallops, sponges, and mollusks.

While a continental shelf is coincident with the exclusive economic zone (EEZ) out to 200 nautical miles, the ECS is not an extension of the EEZ. Sovereign rights that apply to the EEZ, especially rights to the resources of the water column (e.g., pelagic fisheries) do not apply to the ECS.

Establishing ECS limits will define the U.S. continental shelf in concrete geographical terms. Moreover, the United States has an inherent national interest in knowing, and declaring to others with specificity and certainty, the extent of sovereign rights with regard to the U.S. continental shelf beyond 200 nautical miles. Such certainty and international recognition is important to establishing the stability necessary for development and conservation of these potentially resource-rich areas.

The collection and analysis of the data necessary to support the establishment of the U.S. ECS will, in itself, serve a range of other environmental, geologic, engineering, and resource management needs. The data will provide a better scientific understanding of formation and transformation processes of our continental margins. The United States will gain specific insights related to such areas as climate variability, marine ecosystems, undiscovered or unconventional energy, mineral resources, and hazards resulting from extreme events, such as earthquakes and tsunamis. Finally, exploration of little known areas, particularly in the ice-covered Arctic, will advance our operational capabilities and open new windows on this remote and inaccessible environment.

Data Collection and Analysis

In late 2001, Congress directed the University of New Hampshire's Joint Hydrographic Center (JHC) -- a partnership with NOAA -- to conduct a study that evaluated current data holdings relevant to establishing the U.S. ECS, and to recommend what additional data would be needed. This study identified a number of areas where the United States may have extended continental shelf: the Atlantic East Coast, the Gulf of Mexico, the Gulf of Alaska, the Bering Sea, the Arctic Ocean, Kingman Reef/Palmyra Atoll, and the Mariana Islands/Guam.

This amounts to about one million square kilometers or approximately twice the size of California. Roughly half of that area is likely to exist off Alaska. Additional analyses and data collection suggest an even

larger ECS, in these and possibly other areas. As additional data are collected and existing data analyzed, we will begin to come to a more definitive conclusion as to the extent of the U.S. ECS.

Since 2002, the JHC has continued to receive grants from NOAA as directed by Congress to collect the bathymetric data specified in the study. The JHC has collected more than one million square kilometers of bathymetric data from eleven cruises: Arctic Ocean (2003, 2004, 2007), Gulf of Alaska (2005), Gulf of Mexico (2007), Atlantic Ocean (2004, 2005, 2008), Northern Mariana Islands and Guam (2006, 2007), and Bering Sea (2003). A cruise is planned for an area off Kingman Reef and Palmyra Atoll in 2008 or early 2009.

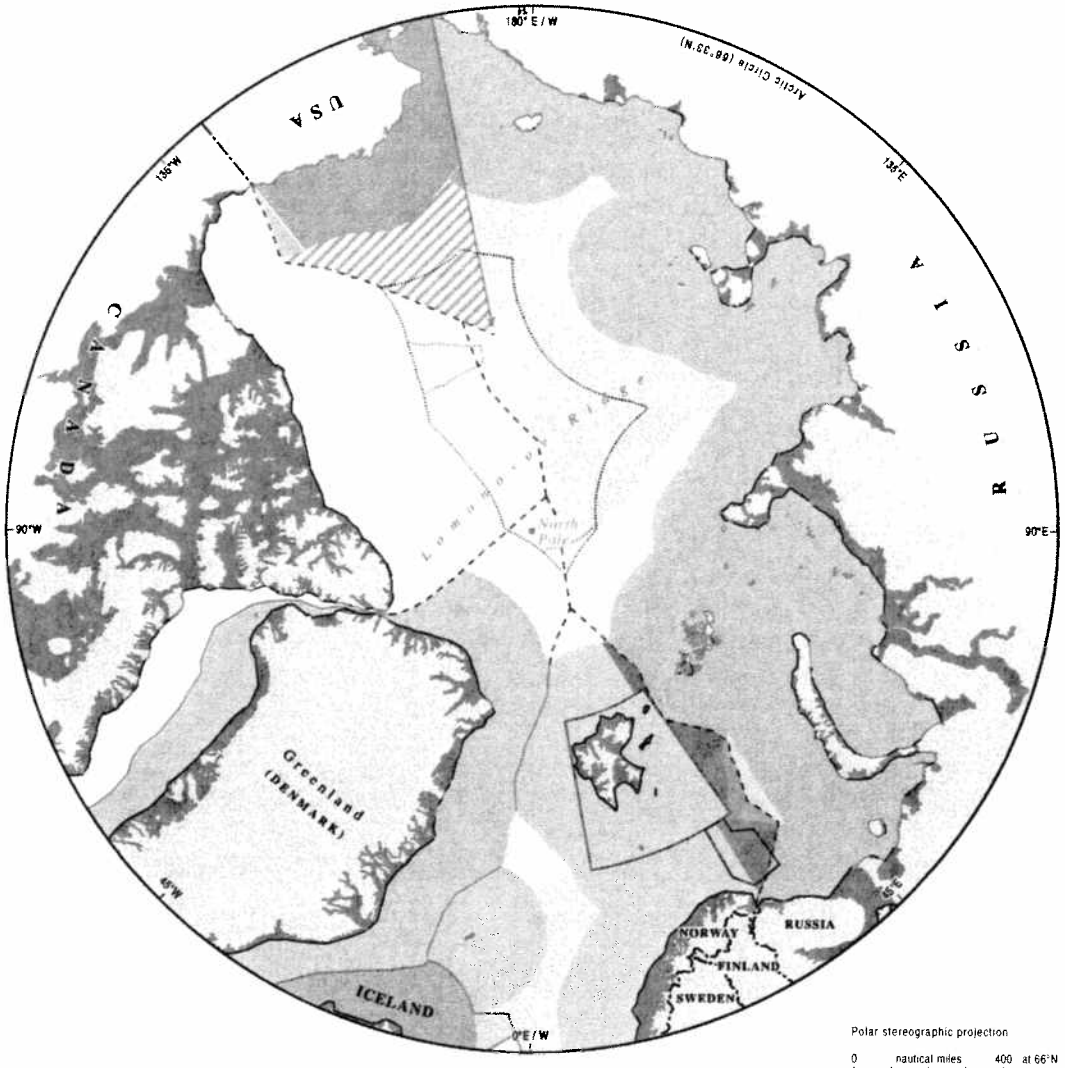
All data collected thus far by the United States in support of defining its continental shelf have been released to the public. The bathymetric data is available from the National Geophysical Data Center and the Joint Hydrographic Center

http://www.state.gov/g/oes/continentalshelf/

IBRU
International Boundaries

Durham University

Maritime jurisdiction and boundaries in the Arctic region



Polar stereographic projection

0 nautical miles 400 at 66°N

0 kilometres 600

- Internal waters
- Canada territorial sea and EEZ
- Potential Canada continental shelf beyond 200 nm
- Denmark territorial sea and EEZ
- Denmark claimed continental shelf beyond 200 nm
- Potential Denmark continental shelf beyond 200 nm)
- Iceland EEZ
- Iceland claimed continental shelf beyond 200 nm
- Norway territorial sea and EEZ / Fishery zone Jan Mayen) / Fishery protection zone (Svalbard)
- Norway claimed continental shelf beyond 200 nm
- Russia territorial sea and EEZ
- Russia claimed continental shelf beyond 200 nm
- Overlapping Norway / Russia EEZ
- Overlapping Norway EEZ / Russia claimed continental shelf beyond 200 nm
- Overlapping Norway / Russia claimed continental shelf beyond 200 nm
- USA territorial sea and EEZ
- Potential USA continental shelf beyond 200 nm
- Overlapping Canada / USA EEZ
- Straight baselines
- Agreed boundary
- Median line
- 350 nm from baselines
- 100 nm from 2500 m isobath (beyond 350 nm from baselines)
- Svalbard treaty area
- Iceland - Norway joint zone
- Norway - Russia 'Grey Area' (agreed fishing regime)
- Canada EEZ boundary claim
- Eastern Special Area

NATIONAL GEOGRAPHIC NEWS
NATIONALGEOGRAPHIC.COM/NEWS

New Seafloor Maps May Bolster U.S. Arctic Claims

Jeannette J. Lee in Anchorage, Alaska
Associated Press

February 12, 2008

New seafloor mapping data show the foot of Alaska's continental slope extends more than 100 nautical miles (185 kilometers) farther from the U.S. coast than previously believed, U.S. federal scientists said Monday.

The National Oceanic and Atmospheric Administration (NOAA) data could bolster claims the U.S. might make in the Arctic, as nations in the region compete for potentially rich reserves of oil, gas, and minerals buried beneath the sea floor.

(Related story: Arctic Oil Rush Sparks Battles Over Seafloor [August 23, 2007])

Federal officials said the data would support the U.S. if the country chooses to jockey with Russia, Canada, and other circumpolar nations under the international Law of the Sea treaty to carve out boundaries off their northern coasts. (See a map of the Arctic Ocean.)

The Law of the Sea confers sovereign rights over a country's continental shelf beyond the normal boundary of 200 nautical miles (370 kilometers) if the country can substantiate its claims through scientific evidence.

The U.S. is the only Arctic nation not party to the Law of the Sea treaty, which is a contentious issue in Congress. The Bush administration has been pushing for its approval.

A Partial Answer

"We found evidence that the foot of the slope was much farther out than we thought," said Larry Mayer, the chief scientist for the expedition last year. "That was the big discovery."

Scientists said their findings do not completely settle the question of where the U.S. could set a plausible boundary.

"There's no question that the potential U.S. continental shelf and the potential shelf from Canada will have some overlap," said Andy Armstrong, NOAA co-director of the Joint Hydrographic Center at the University of New Hampshire. "We'll have to work with bordering nations to sort out any potential overlaps."

Mayer said the boundary with Russia is "just about established."

Bottom of the Ocean

The expedition, which cost at least 1.2 million U.S. dollars, focused on a section of the Chukchi Sea about 400 to 600 miles (645 to 965 kilometers) north of Alaska.

Scientists covered more than 6,200 miles (about 10,000 kilomters), taking bathymetric soundings using multibeam sonar from the deck of an icebreaker, the U.S. Coast Guard cutter *Healy,* said Mayer, who is also co-director of the Joint Hydrographic Center at the university in Durham, New Hampshire.

The resulting images of the relatively unexplored region are the most detailed ever collected and will be applied to a variety of research topics, said Capt. Steve Barnum director of NOAA's Office of Coast Survey.

"These are entirely new insights into what the ocean bottom looks like," Barnum said. "The data will be used to gain a better understanding of many things, including ecosystems and climate circulation models."

The next expedition is planned for mid-August through early September, Mayer said, and will follow a geologic feature that could extend the foot of the slope to the north and east.

A U.S. study suggests as much as 25 percent of the world's undiscovered oil and gas could be hidden beneath the Arctic seabed.

Growing evidence that global warming is shrinking polar ice (see story)—opening up resource development and new shipping lanes—has added to the urgency of the claims.

Copyright 2008 Associated Press. All rights reserved. This material may not be published, broadcast, rewritten, or redistributed.

Free Email News Updates
Sign up for our Inside National Geographic newsletter. Every two weeks we'll send you our top stories and pictures (see sample).

© 1996-2008 National Geographic Society. All rights reserved.

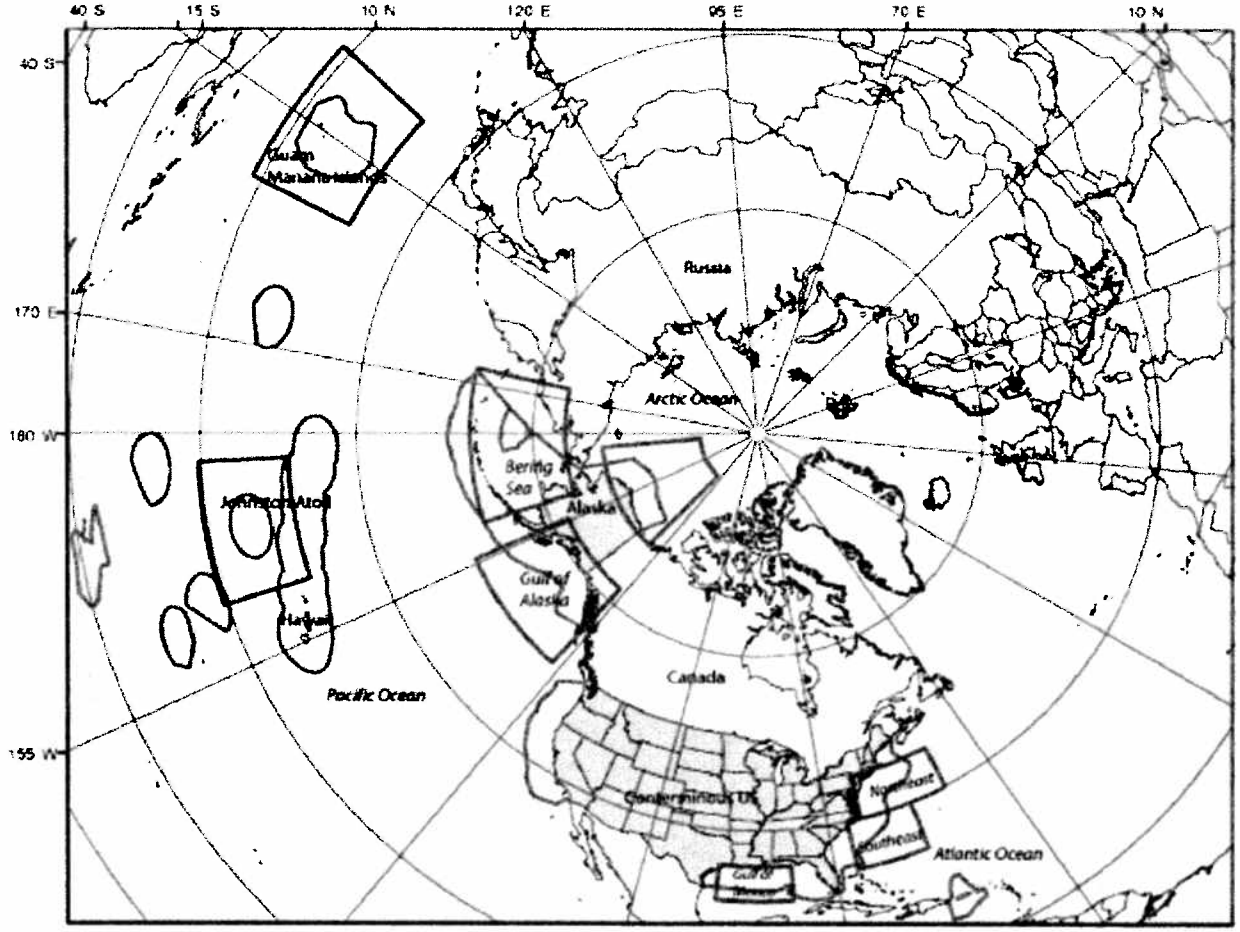


Figure 2: Eight regions (in red) adjacent to the United States and its dependences, where there likely exists extended continental shelf (ECS) beyond 200 nautical miles (in blue) identified by Mayer et al.(2002), The compilation and analysis of data relevant to a U.S. Claim under the United Nations Law of the Sea Article 76: A Preliminary Report. The regions presented in this figure are the result of an academic study, do not represent a formal position of the United States, and are without prejudice to any rights that the United States has with respect to its continental shelf.

Senator Lisa Murkowski

CSIS – Arctic Forum

Wednesday, July 23, 2008

• Thank you for the invitation to speak to you about one of my favorite topics, the Arctic. The United States has been an Arctic nation since the purchase of Alaska from Russia in 1867. While I am fairly confident that each of you were already aware of this, the challenge is getting the general public to understand not only that the United States has land in the Arctic, but this area is critically important for many reasons.

• The heightened focus on the Arctic of late is primarily due to the impacts of climate change and the fact that these changes are occurring at an unprecedented rate in this region. This makes the Arctic the most vital place to be studying how climate change can affect the entire planet.

• This past summer we saw the Northwest Passage completely ice free for the first time in recorded history. Canada responded by announcing plans for an Arctic military training facility and deep-water port on the Northwest Passage. They followed that up by calling for the construction of 6 to 8 ice strengthened patrol boats, to be in operation by 2014, to assert their sovereignty claim in the Arctic.

- In an expedition some have compared to the United States planting a flag on the moon, a Russian-led team descended 13,000 feet to the seabed on August 2 of last year and planted a Russian flag directly on the North Pole.

- This intense interest in claiming Arctic territory is primarily driven by the quest for Arctic resources. Until recently, the resources of the Arctic were deemed to be too difficult and expensive to develop. But with increasing access and high energy prices, the Arctic's wealth, which is conservatively estimated to contain up to 25% of the world's remaining oil and gas reserves, including over 100 billion barrels of oil, is now being explored and developed at an unprecedented rate.

- Russia is turning its eye to the Arctic's vast energy reserves as they are building the first offshore oil rig that can withstand temperatures as low as minus 50 degrees Celsius and heavy pack ice. They are also reducing taxes and bureaucratic hurdles in order to encourage new oil development in the Arctic.

- Maritime activities relating to the transportation of goods, oil and gas, tourism and research will surely increase as access to the Arctic Ocean increases. Work is underway to determine the way forward in the development of a shipping regime through the Northern Sea Route, Northwest Passage, and even directly over the pole.

• The dramatic retreat of Arctic sea ice has focused much attention on the development of these routes, but in order to be viable options to the Suez and Panama canals, the need for a comprehensive plan addressing safety, security, navigation, environmental protection, vessel standards and economics must be developed and in place.

• The Arctic is truly the last frontier. One of the few places on earth where all the borders aren't drawn on the map yet and some of those that are, are disputed. A recent article in Parade magazine entitled, " The Race to Own the Arctic", will certainly bring more attention to the region, given its readership of approximately 70 million Americans. But the title of the article emphasizes the competition underway to own the resources by extending continental shelf claims. While the anticipated claims do overlap in many cases, there exists an opportunity to address these claims and many of the other key issues in the Arctic, cooperatively and multi-laterally.

• On May 28th, representatives of the 5 coastal states bordering the Arctic-Canada, Denmark, Norway, Russia and the United States met in Ilulissat (Ill-you-lis-at), Greenland, and adopted a declaration of cooperation in the Arctic. The representatives recognized the undeniable uniqueness of the region and the dramatic changes occurring there, with the potential for profound effects on the environment and indigenous people of the region.

• The Ilulissat Declaration recognizes the responsibilities of the Arctic nations to be good stewards and to work together to protect the fragile Arctic ecosystem. The Arctic is a marine environment surrounded by continents and a shipping disaster or oil spill would not just effect the local area, but could jeopardize the entire Arctic ecosystem and cause irreversible damage.

• The Declaration supports the Law of the Sea Treaty as the legal framework for governance in the Arctic, saying that a new international legal regime is not needed to govern this region. If the Law of the Sea is the overarching legal mechanism, then it is even more crucial that the United States ratify this treaty.

• Russia submitted an extended continental shelf claim in 2002 that would grant them 460,000 square miles of the Arctic Ocean's bottom resources. That is an area the size of Texas, California and Indiana combined. Their claim was rejected for lack of technical data, but they have since resubmitted their claim with new data following their flag planting expedition last summer.

• Denmark and Canada are anxious to establish their own claims in the Arctic and

Norway's claim is currently under review by the Commission on the Limits of the Continental Shelf.

- But here in the United States, we are not able to make a claim until we ratify the Convention. There are some who do not see the point in joining the rest of the world in ratifying the treaty. They say that the U.S. already enjoys the benefits of the Treaty even though we are not a member and that by not becoming a party to the Treaty, we can pick and choose which sections we abide by, while not subjecting our actions to international review.

• But I believe it is very important for the United States to be a party to this Treaty and be a player in the process, rather then an outsider hoping our interests are not damaged. Accession to the Convention would give current and future administrations both enhanced credibility and leverage in calling upon other nations to meet Convention responsibilities. Given the support for the Treaty by Arctic nations and the drive to develop natural resources, the Treaty will also provide the environmental framework to develop these resources while minimizing environmental impacts.

• According to the U.S. Arctic Research Commission, if the United States were to become a party to the Treaty, we could lay claim to an area in the Arctic of about 450,000 square kilometers-or approximately the size of California. But if we do not become a party to the Treaty, our opportunity to make this claim, and have the international community respect it, diminishes considerably-as does our ability to prevent claims like Russia's from coming to fruition.

• The Administration has shown strong leadership in being a party to the Ilulissat Declaration and our intentions to work cooperatively with the other Arctic nations. It is time for the United States Senate to show the leadership to ratify the treaty.

• There are a number of other areas where the United States is leading the way in the Arctic. Our science budget for Arctic research is the most of any country and through efforts like the International Polar Year, American scientists are working on well over 100 projects with scientists from around the world. It is my hope that IPY will usher in a new era of scientific cooperation and collaboration in the Arctic.

• Congress recently passed a resolution, which the President signed into law, to develop an international fisheries regime for the Arctic. Alaska, like Norway and Iceland, has been very successful in managing our fisheries and there is every reason to believe that this will continue with a very precautionary approach in the Arctic. In fact, the North Pacific Fisheries Management Council, the advisory body for the federal fisheries off of Alaska, proactively closed all fisheries in the Arctic until an assessment of the fish stocks could be made and a management plan developed.

• Although the United States is a world leader in some facets of the Arctic, there are

many others areas that the question must be asked: Is the United States a leader in addressing climate change? For the first time the Senate started the legislative debate on the issue of climate change. We are far from an end-game, but movement is afoot. What about sustainable energy development? Alternative energy? Environmental protection? We need to be leaders in each of these areas.

• We have an incredible opportunity to develop an international policy and cooperative regime in the Arctic. With such a fragile ecosystem, however, our first effort may be our last chance to get it right. We sit on the edge of the precipice, with continued change projected to occur whether we are prepared or not. How we address this challenge and adapt in the Arctic will be an example for the rest of the world.

• The Ilulissat Declaration gives us hope that international cooperation among Arctic nations is possible and by working together to develop a framework for governing the region, we can mutually provide for its' protection and preservation.

• We will only succeed in the Arctic if it is a commitment that all nations share and undertake together. The future of the Arctic depends on it. Thank you.

###

CHAIRMAN OF THE JOINT CHIEFS OF STAFF

WASHINGTON, D.C. 20318-9999

26 June 2007

The Honorable Joseph Biden, Jr.
Chairman, Committee on Foreign
Relations
United States Senate
Washington, D.C. 20510-6225

Dear Mr. Chairman,

As the world's preeminent maritime power, leader in the War on Terrorism, and Nation with the largest exclusive economic zone, the United States should accede to the Law of the Sea Convention during this session of Congress. No country has a greater interest in public order for the world's oceans. Becoming a Party to the Convention will ensure our leadership role in the continuing development of oceans law and policy.

The Convention codifies navigation and overflight rights and high seas freedoms that are essential for the global mobility of our Armed Forces. It furthers our National Security Strategy, strengthens the coalition, and supports the President's Proliferation Security Initiative.

From sustaining forward deployed military forces, to ensuring the security of our ports and waters as well as advancing our most important economic and foreign policy objectives, it is important that the United States become a Party to the Convention.

In closing, we offer our gratitude for your efforts and those of Senator Lugar to bring this important Convention to the Senate for consideration.

Very Respectfully,

E. P. GIAMBASTIANI
Admiral, U.S. Navy
Vice Chairman
of the Joint Chiefs of Staff

PETER PACE
General, United States Marine Corps
Chairman
of the Joint Chiefs of Staff

M. G. MULLEN
Admiral, U.S. Navy
Chief of Naval Operations

T. MICHAEL MOSELEY
General, USAF
Chief of Staff

J. T. CONWAY
General, U.S. Marine Corps
Commandant of the Marine Corps

GEORGE W. CASEY
General, U.S. Army
Chief of Staff, U.S. Army

Copy to:
The Honorable Harry Reid
The Honorable Mitch McConnell
The Honorable Richard Lugar

geology.com Search

Redoubt Volcano
Eruption Photos

Geology.com News Careers Articles US Maps World Maps Satellite Images Dictionary Store

Link to Geology.com
Bookmark ...
Site Search
Search

Ads by Google
Ads by Google

Domestic Energy Resources
Find out how much oil exists within the United States
EnergyTomorrow.org

Oil and Gas Investment
Very strong oil and gas industry investment for monthly income!
www.DirectionalDrillingRig.com

Cruises to Arctic Circle
Travel in Luxury on Crystal Cruises Voted World's Best Cruise Line
www.CrystalCruises.com

Oil & Gas Investments
High-Return Partnership Opportunity More Information Available on Site!
www.OilGasDividend.com/Energy

Oil & Gas Land Management
Software built by land people, for land people: Enterprise Land 3.0
www.p2es.com

Most Popular
What is Geology?
Geology Articles
Geology News
Geology Dictionary
US Map Collections
World Map Collection
Mineral Rights
What Causes a Tsunami?
Rock Tumblers

Google Maps
San Andreas Fault Map
Meteor Crater Map
Below Sea Level
State High Points Map
Sahara Desert Map
Plate Tectonics Map
Topo Maps

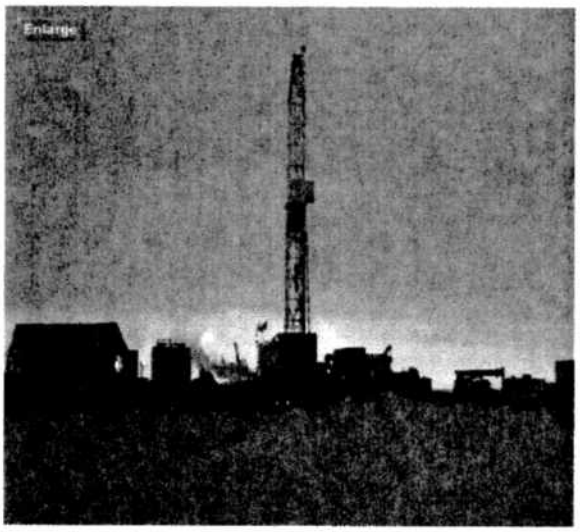
Satellite Images
US Cities
US States
World Countries
Africa
Asia
Australia
Canada

USGS Arctic Oil and Gas Report

Estimates of Undiscovered Oil and Gas North of the Arctic Circle

A USGS fact sheet from July 2008

The U.S. Geological Survey (USGS) has completed an assessment of undiscovered conventional oil and gas resources in all areas north of the Arctic Circle. Using a geology-based probabilistic methodology, the USGS estimated the occurrence of undiscovered oil and gas in 33 geologic provinces thought to be prospective for petroleum. The sum of the mean estimates for each province indicates that 90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids may remain to be found in the Arctic, of which approximately 84 percent is expected to occur in offshore areas.



Malik Project Drill Rig on the Mackenzie Delta of the Canadian Arctic. USGS Image

Introduction

In May 2008 a team of U.S. Geological Survey (USGS) scientists completed an appraisal of possible future additions to world oil and gas reserves from new field discoveries in the Arctic. This Circum-Arctic Resource Appraisal (CARA) evaluated the petroleum potential of all areas north of the Arctic Circle (66.56° north latitude); quantitative assessments were conducted in those geologic areas considered to have at least a 10-percent chance of one or more significant oil or gas accumulations. For the purposes of the study, a significant accumulation contains recoverable volumes of at least 50 million barrels of oil and/or oil-equivalent natural gas. The study included only those resources believed to be recoverable using existing technology, but with the important assumptions for offshore areas that the resources would be recoverable even in the presence of permanent sea ice and oceanic water depth. No economic considerations are included in these initial estimates; results are presented without reference to costs of exploration and development, which will be important in many of the assessed areas. So-called nonconventional resources, such as coal bed methane, gas hydrate, oil shale, and tar sand, were explicitly excluded from the study. Full details of the CARA study will be published later.

A number of onshore areas in Canada, Russia, and Alaska already have been explored for petroleum, resulting in the discovery of more than 400 oil and gas fields north of the Arctic Circle. These fields account for approximately 240 billion barrels (BBOE) of oil and oil-equivalent natural gas, which is almost 10 percent of the world's known conventional petroleum resources (cumulative production and remaining proved reserves). Nevertheless, most of the Arctic, especially offshore, is essentially unexplored with respect to petroleum. The Arctic Circle encompasses about 6 percent of the Earth's surface, an area of more than 21 million km2 (8.2 million mi2), of which almost 8 million km2 (3.1 million mi2) is onshore and more than 7 million km2 (2.7 million mi2) is on continental shelves under less than 500 m of water. The extensive Arctic continental shelves may constitute the geographically largest unexplored prospective area for petroleum remaining on Earth.

Methodology

A newly compiled map of Arctic sedimentary basins (Arthur Grantz and others, unpublished work) was used to define geologic provinces, each containing more than 3 km of sedimentary strata. Assessment units (AUs)—mappable volumes of rock with common geologic traits—were identified within each province and quantitatively assessed for petroleum potential. Because of the sparse seismic and drilling data in much of the Arctic, the usual tools and techniques used in USGS resource assessments, such as discovery process modeling, prospect delineation, and deposit simulation, were not generally applicable. Therefore, the CARA relied on a probabilistic methodology of geological analysis and analog modeling. A world analog database (Charpentier and others, 2008) was developed using the AUs defined in the USGS World Petroleum Assessment 2000 (USGS World Assessment Team, 2000). The database includes areas that account for more than 95 percent of the world's known oil and gas resources outside the United States.

Oil & Gas Land Management
Software built by land people, for land people: Enterprise Land 3.0
www.p2es.com

Oil and Gas investing
Information on investing in today's complex oil and gas energy market.
oilgold.net/

Leasing Your Minerals?
Help Negotiating Best Bonus & Terms Increase Your Compensation.
www.leaseauctionhouse.com

Natural Gas Company
Gas Pipeline Stock Set to Surge Free Report offers insights and..
www.freeinvestingreports.com/gas

Ads by Google

Europe
South America
United States

US Geology & Maps
Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
Florida
Georgia
Hawaii
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming
Minerals

For each assessment unit, the CARA team assessed the probability (AU probability) that a significant oil or gas accumulation was present. This evaluation of AU probability was based on three geologic elements: (1) charge (including source rocks and thermal maturity), (2) rocks (including reservoirs, traps, and seals), and (3) timing (including the relative ages of migration and trap formation, as well as preservation). Each assessment unit was ranked according to its AU probability; those AUs judged to have less than a 10-percent probability of a significant accumulation were not quantitatively assessed.

In addition to the AU probability, the number of accumulations, the size-frequency distribution of accumulations, and the relative likelihood of oil versus gas were assessed for each AU and combined by means of a Monte Carlo simulation. The probabilistic results reflect the wide range of uncertainty inherent in frontier geological provinces such as those of the Arctic.

Results—Resource Summary

Within the area of the CARA, 25 provinces were quantitatively assessed; 8 provinces were judged to have less than a 10-percent probability of at least one significant accumulation in any AU and were, therefore, not assessed. Results of individual AU assessments are not reported here, but the AUs are shown as mapped areas on figure 1, where they are color-coded for the probability of at least one undiscovered accumulation of minimum size. The provinces are listed in table 1, in ranked order of total mean estimated oil-equivalent volumes of undiscovered oil, gas, and natural gas liquids (NGL). The provinces are shown in figures 2 and 3, where they have been color-coded with respect to fully risked (including AU probabilities) potential for gas and oil, respectively.

More than 70 percent of the mean undiscovered oil resources is estimated to occur in five provinces: Arctic Alaska, Amerasia Basin, East Greenland Rift Basins, East Barents Basins, and West Greenland–East Canada. More than 70 percent of the undiscovered natural gas is estimated to occur in three provinces, the West Siberian Basin, the East Barents Basins, and Arctic Alaska. It is further estimated that approximately 84 percent of the undiscovered oil and gas occurs offshore. The total mean undiscovered conventional oil and gas resources of the Arctic are estimated to be approximately 90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids.

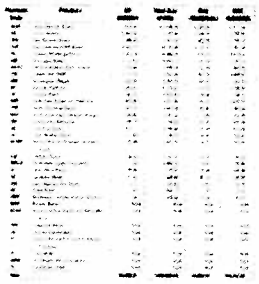


Table 1. Summary of Results of the Circum-Arctic Resource Appraisal.

References

Charpentier, R.R., Klett, T.R., and Attanasi, E.D., 2008, Database for assessment unit-scale analogs (exclusive of the United States): U.S. Geological Survey Open-File Report 2007-1404 [http://pubs.usgs.gov/of/2007/1404/].

USGS World Assessment Team, 2000, U.S. Geological Survey World Petroleum Assessment 2000-Description and Results: U.S. Geological Survey Digital Data Series – DDS60 [http://pubs.usgs.gov/dds/dds-060/].

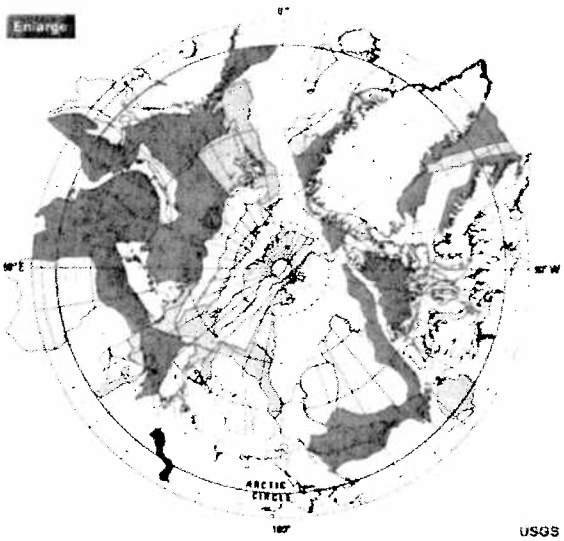


Figure 1. Assessment units (AUs) in the Circum-Arctic Resource Appraisal (CARA) color-coded by assessed probability of the presence of at least one undiscovered oil and/or gas field with recoverable resources greater than 50 million barrels of oil equivalent (MMBOE). Probabilities for AUs are based on the entire area of the AU, including any parts south of the Arctic Circle.

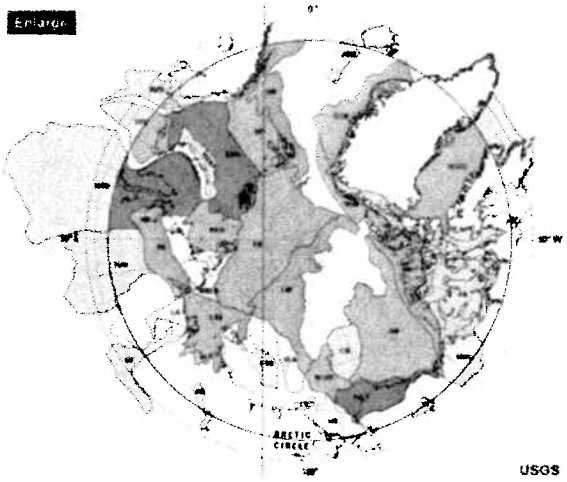


Figure 2. Provinces in the Circum-Arctic Resource Appraisal (CARA) color-coded for mean estimated undiscovered gas. Only areas north of the Arctic Circle are included in the estimates. Province labels are the same as in table 1.

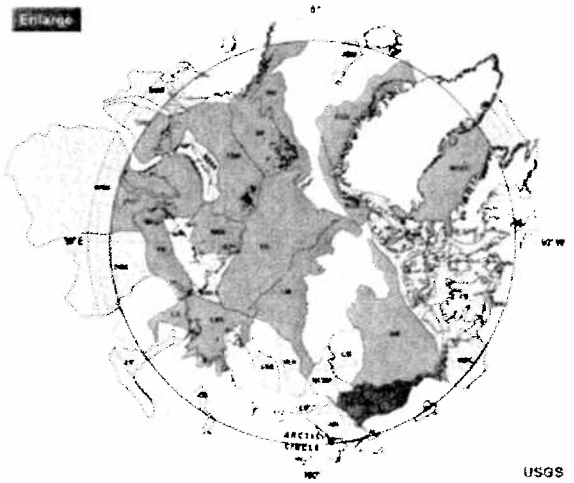


Figure 1. Assessment units (AUs) in the Circum-Arctic Resource Appraisal (CARA) color-coded by assessed probability of the presence of at least one undiscovered oil and/or gas field with recoverable resources greater than 50 million barrels of oil