



**THE FAST-CHANGING ARCTIC:
RETHINKING ARCTIC SECURITY
FOR A WARMER WORLD**
Edited by Barry Scott Zellen

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Contents

Foreword: Witnessing an Arctic Renaissance	ix
<i>Mead Treadwell, Lieutenant Governor, State of Alaska</i>	

ARCTIC CLIMATE CHANGE: STRATEGIC CHALLENGES AND OPPORTUNITIES

1. The Fast-Changing Maritime Arctic	1
<i>Lawson W. Brigham</i>	
2. Can We Keep Up with Arctic Change?	17
<i>Alun Anderson</i>	
3. “Politicization” of the Environment: Environmental Politics and Security in the Circumpolar North	35
<i>Lassi Kalevi Heininen</i>	
4. Conceptualizing Climate Security for a Warming World: Complexity and the Environment-Conflict Linkage	57
<i>Daniel Clausen and LTJG Michael Clausen, USCG</i>	

COOPERATION AND CONFLICT: PATHS FORWARD

5. Cooperation or Conflict in a Changing Arctic? Opportunities for Maritime Cooperation in Arctic National Strategies	83
<i>Ian G. Brosnan, Thomas M. Leschine, and Edward L. Miles</i>	

6. Energy and the Arctic Dispute: Pathway to Conflict or Cooperation? 103
Nong Hong
7. Maritime Boundary Disputes in East Asia: Lessons for the Arctic 115
James Manicom
8. Babysteps: Developing Multilateral Institutions in the Arctic 135
Maj. Henrik Jedig Jørgensen

REGIONAL PERSPECTIVES

EUROPE AND THE HIGH NORTH ATLANTIC

9. Structural, Environmental, and Political Conditions for Security Policy in the High North Atlantic: The Faroe Islands, Greenland, and Iceland 159
Rasmus Gjedssø Bertelsen

NORTH AMERICA

10. U.S. Arctic Policy: The Reluctant Arctic Power 189
Rob Huebert
11. U.S. Defense Policy and the North: The Emergent Arctic Power 227
Barry Scott Zellen

RUSSIA

12. Mirror Images? Canada, Russia, and the Circumpolar World 257
P. Whitney Lackenbauer
13. Russia's Arctic Strategy: Ambitions and Restraints 281
Katarzyna Zysk
14. Russia Opens Its Maritime Arctic 297
Lawson W. Brigham
15. Regional Security and Prosperity: The U.S.–Russia Reset in the Antimeridianal Arctic 307
Caitlyn Antrim

CONCLUDING OBSERVATIONS

16. Stability and Security in a Post-Arctic World: Toward a Convergence of Indigenous, State, and Global Interests at the Top of the World 339
Barry Scott Zellen
- Afterword: Think Again – The Arctic 369
Lawson W. Brigham
- About the Contributing Authors 377
- Index 387

Foreword: Witnessing an Arctic Renaissance

Mead Treadwell, Lieutenant Governor, State of Alaska

Long famed for its inaccessibility, the Arctic Ocean is rapidly becoming accessible – with a rising tide of trade, commerce and resource development fostered by unprecedented seasonal sea ice retreats.¹

For Arctic states across the globe, the accessible Arctic Ocean presents opportunities of a lifetime. Consider the following: The U.S. Geological Survey estimates that 13 per cent of the world’s undiscovered oil and 23 per cent of its undiscovered gas will be found in the Arctic, and six of the eight Arctic nations are already engaging in offshore energy exploration. Sea ice retreat has beckoned major new shipping in the North, and Russia will have sent as many as eighteen vessels via the Northern Sea Route in 2011 – including a giant gas condensate tanker, which transited the route in a record eight days.

The Arctic’s energy resources, minerals, tourism, and shipping potential make this increasingly accessible region a classic emerging market. Billions of public and private dollars will be invested in its development. New infrastructure will increase our physical access to the Arctic, and commercial expansion will follow.

We are witnessing an exciting Arctic renaissance. Just as the International Polar Year 2007–9 revealed that the Arctic is not static but is constantly changing, Arctic borders are likewise on the move. Lingering border disputes, issues regarding new territory, and implementation of the Law of the Sea Treaty are among the sovereign challenges we’re working to resolve in

the region. Among Arctic neighbors, it's an ongoing balancing act between competition and cooperation.

But I'm most excited about the cooperation. Through my participation in meetings of the U.S. Arctic Research Commission, the Russian Geographical Society, the Northern Forum, the Northern Research Forum, the Arctic Council and its predecessor, the Arctic Environmental Protection Strategy – whose record of circumpolar cooperation has spanned twenty years and counting – I've been privileged to see us build a real neighborhood at the top of the world.

The Arctic needs outside partners who share our vision of opportunity and respect for the people and critters that have always lived here. The best partners favor cooperation, transparency, and respect as we engage in the rulemaking and resource development of our region, and they bring science and investment to the table. One cooperative effort that I'm especially proud of is the Arctic Council's Arctic Marine Shipping Assessment (AMSA) – which the U.S. Arctic Research Commission sponsored during my chairmanship, and, in which – for the first time – eight Arctic nations gathered to discuss cooperation on safe shipping their region. As a result, further cooperation is taking place among Arctic partners on multiple fronts to implement the recommendations of AMSA:

- A historic search and rescue agreement was signed at the 7th Annual Arctic Council Ministerial in Nuuk, Greenland, in May 2011, and the first implementation meeting was a Canadian-led search and rescue exercise that took place just several months following. Such exercises expose our deficiencies in equipment, mapping, ice forecasting, ports and other aids to navigation, and help our militaries and civil responders “play well” together.
- Arctic partners have advocated that the International Maritime Organization adopt a mandatory polar code to set minimum standards for ships operating in polar waters.
- The Arctic Council is negotiating an international agreement on Arctic marine oil pollution and response.
- Joint discussions on the development and upgrades of common Arctic security infrastructure – including deep-water

ports, vessel-tracking systems, Polar-class icebreakers, telecommunications, and high-resolution mapping and ice imagery – are underway.

Let us hope that these developments lead to the kind of coordinated investment that is the hallmark of the St. Lawrence Seaway system – a model established between the United States and Canada for that shared waterway on our common border.

Diligent scientific monitoring has been the keystone of Arctic cooperation and negotiation so far. The Arctic Council’s sponsorship of a Sustained Arctic Observing Network (SAON) is another deliverable of our successful cooperation, and the best International Polar Year legacy we can leave behind. If we do SAON right, our research will support sustainable Arctic energy; safe, secure, and reliable shipping; successful search and rescue operations; more advanced oil-spill prevention and response techniques; better knowledge of how to protect and manage our species populations in the region; and increased data for modeling to produce more accurate and timely forecasts. All told, it will help us predict changing climate conditions, guard against ocean acidification, and monitor moving fish stocks and changing populations of seals, walrus, polar bear and birdlife.

Over the next few years, we must see even more cooperation across the Arctic neighborhood. The following chapters make clear that an understanding of energy, shipping, sovereignty, and climate are key to our successful collaboration.

Note

1 On September 16, 2012, Arctic sea ice extent fell to a record low of 1.32 million square miles. As National Snow and Ice Data Center (NSIDC) director Mark Serreze observed: “While lots of people talk about opening of the Northwest Passage through the Canadian Arctic islands and the Northern Sea Route along the Russian

coast, twenty years from now in August you might be able to take a ship right across the Arctic Ocean.” National Snow and Ice Data Center, “Press Release: Arctic sea ice reaches lowest extent for the year and the satellite record,” September 19, 2012, http://nsidc.org/news/press/2012_seaiceminimum.html.