

Foreword

In July 2008, my wife Rosalynn and I joined over one hundred distinguished scholars, political and religious leaders, journalists, and business executives for a weeklong tour of the high Norwegian Arctic aboard the *National Geographic Endeavor*, a vessel operated by Lindblad Explorations. Of all the places in the world I have visited as a naval officer or during and after my time as president of the United States, this voyage to the Arctic stands out in memory as one of the most enlightening journeys I have taken.

One afternoon that I will never forget, Rosalynn and I ventured out from the ship on a small boat with Larry and Lucy Page, Tom Daschle, and the undersea specialist David Cothran to launch a remotely operated vehicle in about 240 feet of remarkably clear water. We photographed many animals that day (many looked like plants) growing on the sea bottom and feeding in the current.

If you have never paddled a kayak up close to a bearded seal resting on a glacier, we can attest that it is an unforgettable, wonderful experience. We stepped ashore for a walk along a fjord near the southern tip of Spitsbergen, beneath a very high cliff that was almost completely blanketed with nesting birds. As avid birdwatchers, we enjoyed the many birds we saw each day of our voyage, including rare Ivory Gulls.

The next morning, back on board the *Endeavor*, we got up early to view two large polar bears feeding on a ringed seal, while a smaller one swam around them, then climbed out on a nearby floe. The largest bear then swam over to a nearby sheet of ice and bathed and dried itself while its mate slept nearby. Although we got very close, they never seemed disturbed.

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At that point in the voyage we were close to Edgeoya Island, where we went ashore on the west coast for a long hike, with reindeer roaming all around. Later that night, we steamed through the Freemanssundet Strait, moving northwest toward Nordaustlandet Island, whose ice cap is the third largest in the world, after the Antarctic and Greenland.

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Yet, despite its remoteness, the Arctic is an integral part of the entire global climate system, functioning as a natural source of cooling for the planet. Alarming, its ability to regulate Earth's climate is being diminished as the ice and snow cover, which reflect solar heat back into the atmosphere, retreat dramatically amid rising temperatures. Global temperatures are expected to increase, and the sea level, as a result of warming oceans and melting glaciers, is expected to rise 20 inches in the next century. Already, storms in low-lying regions of the world such as Burma and Bangladesh are far more devastating than before, while coastal villagers in Alaska are being forced to move their homes en masse as the sea level increases and protective ice disappears.

Meanwhile, the greatest international interests in the Arctic appear to be fixated not on how to minimize the pervasive damage there, but how to define territory and exercise national dominion over the rich natural resources in terms of oil and gas, fishing, and minerals. The United States has yet to ratify the Law of the Sea Treaty, while Russia and other Arctic nations are making territorial claims.

Given the prevailing circumstances, many of us on board the *Endeavor* understandably began the trip in a pessimistic mood—bemoaning climate change and blaming the state of affairs on the oil producing nations, our own governments, and competition from India, China, and others for scarce energy supplies.

Over the course of the journey, though, a surprising thing happened: The general mood among the ship's passengers seemed to turn more positive as we focused on the possibility of courageous leaders tapping mankind's great potential for science, innovation, efficiency, and strength when united by a challenging goal. In striving to mitigate impacts on the Arctic from climate change, we can create millions of new jobs, working harmoniously with other nations and giving special care to the poor who have least caused global warming, but who will suffer most from it.

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After our enlightening journey aboard the *Endeavor* the Aspen Dialogue and Commission on Arctic Climate Change inquired into the economic and political forces affecting the region and the limited scope of scientific knowledge about its ecosystems. Their findings lead to the conclusion that profound change is in store for the region's inhabitants, including its proud Indigenous Peoples, who have existed for several thousand years in harmony with their environment.

It is our duty to help them in whatever ways possible to adapt to the changing future as we strive to minimize the scale and rate of that change. Ultimately, their interests and those of the rest of us are aligned, for we share one planet with a contiguous climate. That unavoidable reality underpins the observations and recommendations contained in this report, which are the result of the Commission's efforts to understand what is happening in the Arctic and to determine how we can best respond as an international community.

President Jimmy Carter