

Amchitka

and the BOMB

Nuclear Testing in Alaska

DEAN W. KOHLHOFF



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FOREWORD

Dean Kohlhoff died on June 12, 1997, before he had a chance to complete final revisions on his manuscript for *Amchitka and the Bomb*. Because we knew that Dean's greatest unfulfilled wish was to have his story of the environmental consequences of nuclear testing on Amchitka Island told, Nancy Kohlhoff, Dean's widow, and I decided to take up the work of preparing his early draft for publication. In so doing, we hope that we have been faithful to Dean's goal of representing the struggle between the partisans of national security and the defenders of the Aleutian environment as fairly as possible. Dean's interest in the Aleutians was never simply academic. He always saw himself as advocate and defender of the Aleutians and its Aleut people.

MEREDITH WM. BERG
Valparaiso University
Valparaiso, Indiana

Dean worked on this manuscript until only a few days before he passed away. On one occasion, he said to me, "They won't publish my manuscript posthumously, will they?" From then on, I felt that if I could arrange to have the manuscript published, it would be the last, best thing I could do for Dean. Now, his work is finally complete.

NANCY L. KOHLHOFF
Valparaiso, Indiana

PREFACE

In the 1960s and early 1970s, three underground nuclear tests were carried out on Amchitka Island, a small island in the Aleutian Chain. Each blast had its own name—Long Shot, Milrow, and Cannikin—but the name Amchitka became a code word for all of them. Although these tests were the only ones conducted on Alaska soil, there was a new alchemy at work. The tests linked island to bomb and North Pacific to Central Pacific. Amchitka, like Bikini and Eniwetok, became a byword in a new atomic age.

Much controversy surrounded the tests primarily because the island lay in a national wildlife refuge. But other issues besides the ecological ones emerged. Amchitka's geology is prone to earthquakes and tsunamis. If these natural catastrophes could result from the blasts, people far away would be affected. The tests also were framed in the context of the nuclear arms race. Some officials believed the tests were essential to United States security in the face of the Cold War even though they maintained a measure of sympathy for Amchitka's environment. The debate drew many opinions, including those of politicians, scientists, and policy-makers. In the end, the Supreme Court decided for the largest and last test.

My perspective on Amchitka has been shaped by several experiences. Even before I imagined a study like this, I taught courses on the history of American environmentalism. While traveling in Alaska, I met students whose political consciousness was expressed in protest against the bomb and for the safeguarding of the island. After I picked up this topic in 1992, I listened to interviews in which participants expressed a high level of emotional commitment to Amchitka. Then, in the summer of 1994, I understood why.

On a research visit to Adak Island, I experienced the Aleutians for the

first time. Adak Island, which is approximately 200 miles from Amchitka, is teeming with wildlife. Where once a huge military population existed, there now swarm mallards, common teal, loons and ravens, bald eagles, glaucous-winged gulls, parasitic jaegers, and Aleutian terns. Never before had I seen a song sparrow, Lapland longspur, northern phalarope, or gray-crowned rosy finch. In an inlet near Kuluk Bay, harbor seals with doleful-looking faces waited for the tide to deliver their regular supply of food. Fish and wildlife personnel pointed out to me a protective mother sea otter that splashed away with her cub after letting us look on for what felt like an hour. Now, it seemed to me, I understood what Amchitka was really all about!

A study running somewhat parallel to mine has been mounted by my friend and colleague, Dan O'Neill. He, too, has dealt with Alaska's nuclear experience in a pioneering work on Project Chariot called *The Firecracker Boys*. His title refers to nuclear excavation engineers who planned to blast a deepwater port in coastal arctic Alaska. As O'Neill reveals, the project was eventually aborted.

In this book, my objective is to explore why Amchitka Island was used for nuclear blast tests and to report the consequences which followed. I have provided a history of the island and have attempted to reveal the controversies leading to the blasts. Throughout, I have sought impartiality and balance in recording the intense pressures felt by those who believed the tests to be essential and those whose sympathy lay with the preservation of Amchitka's wildlife and environment.

DEAN W. KOHLHOFF
Valparaiso, Indiana
May 12, 1997

AMCHITKA AND THE BOMB

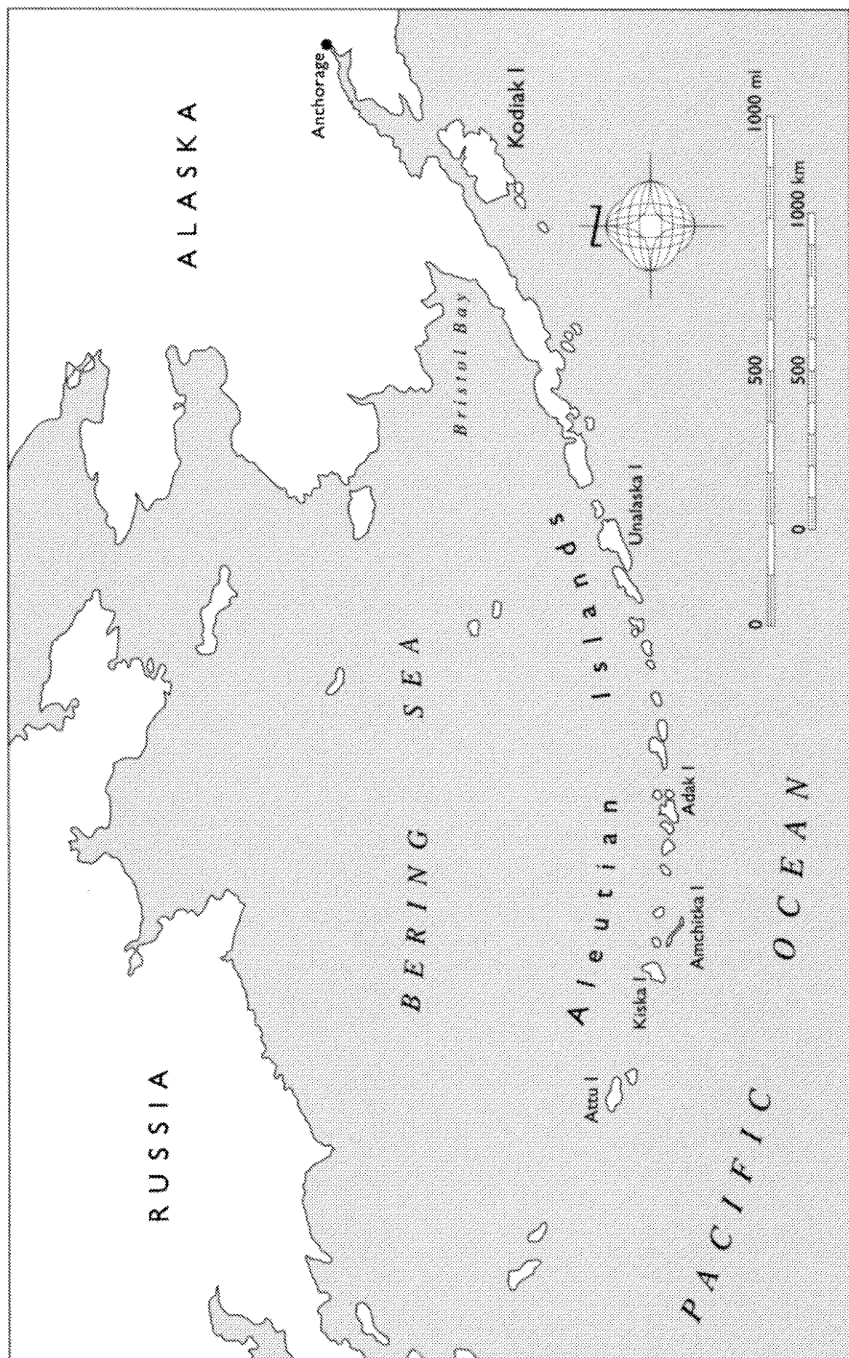
1 / AMONG THE MANY ISLANDS

Islands
between sea and ocean
Aleutian Islands . . .
mountainous bow of storms
belt of emeralds
like the eagle's curved flight above you . . .

—RAYMOND HUDSON,
“Summer’s Bay”

Alaska is an exceptional place by any realistic standards. It is the biggest state in the Union. It holds the most islands, the highest mountains, the largest glaciers, and the greatest number of active volcanoes over any of the other States. Although it was once only a small outpost in the old Russian empire, Alaska is now a giant among its sister states. Aptly, the Russians had called it *Bolshaya Zemlya*, or “Big Land,” which is reflected in its modern nickname, the Great Land. Actually, the Russian *Aliaska*, or *Alyaska*, is an adaptation from the Aleut language meaning “the mainland” or “land that is not an island.” It covers 586,400 square miles with uncommon natural beauty, extraordinary vistas, and monumental features. The land mass is so dominant that it overshadows the many islands that dot the seas surrounding it on three sides. Bordering the Beaufort, Chukchi, and Bering Seas, Alaska protrudes bulky and peninsula-like into the Arctic and Pacific Oceans. These surrounding seas greatly influenced Alaska’s early development, providing resources and accesses for its indigenous people as well as outsiders. Most Alaskans today live in coastal areas with a dizzying cross-hatch of straits, inlets, sounds, channels, passes, narrows, coves, bights, and bays. Alaska’s coastline is over twice as long as the combined coasts of the remaining states in the Union.¹

Two large island groups extend Alaska even farther to the south and west. The Alexander Archipelago lies alongside Canada, running 500 miles south-



east, while the Aleutian Islands point westerly from the mainland toward Asia, reaching into the eastern hemisphere in a narrow 1,100-mile arc. These islands make Alaska the state of many islands. The Aleutian Chain alone contains over two hundred of them.²

Before the Russians explored the region in the eighteenth century, the islands had played an important role in the lives of the Aleuts, Alaska's indigenous people. A rich Aleutian Island mythology emerged from these ancient, Aleut homelands. Aleut stories traditionally included many heroic characters connected to their beloved island homes. Umnak Island was identified as the exact spot where Aleuts first descended from the skies. Another Aleut tale claimed that human mortality resulted as a punishment when the Deity was criticized for creating the Aleutians. An elaborate narrative was told of the Chuginadak Island Woman, a guardian spirit, whose adventures united island communities in peaceful cooperation. "Land Uncle," an emotive term, supposedly an original Aleut name for the Pribilofs, was also the title of a favorite story celebrating these islands. Tigalda Island boasted of three mighty heroes: Daylight Lifter, Mainland Slayer, and Tusk Breaker—super heroes who conquered their non-Aleut Koniag enemies. In some legends, species such as sea lions, fur seals, and birds were magically changed into human form to benefit Aleutian Island life. In Aleut myths, the islands came first, the people later.³

Other Native Alaskan tales also emphasized the primacy of the islands. In the Southeast (as Alaskans call the panhandle), the Tlingit creator, Yeil or Raven, flew to a distant island where he, like Prometheus, appropriated fire for humans. Raven also gave his people the special gift of an island previously reserved only for land and sea animals. According to another legend, the Southeast's many islands were once human ancestors who had been changed into landforms by an eagle. In the north, an Inupiat creation story described the origin of Sevuokuk, now known as St. Lawrence Island. A mythical giant, with one foot planted on Siberia and the other on Alaska, gave Sevuokuk life by squeezing water from sand and stone scooped out of the ocean bed. When dried, the land stuck fast when thrown onto the Bering Sea. Even today, St. Lawrence Island is known as the "island between two continents." Eskimo storytellers proclaimed the deeds of another giant who created Egg and Besboro Islands in Norton Sound. Little and Big Diomed Islands in Bering Strait were affectionately called "island brothers."⁴

(facing page) MAP 1. Alaska and the Aleutian Islands

As interesting as these myths and legends have been, the islands of Alaska also occupy key geographical positions that give them continuing importance. Situated on the northwestern flank of the Pacific Rim, the islands belong to one of the greatest physical features on the globe, the Pacific Ocean. From a global perspective, they are part of an expansive biogeographical area, the Pacific Basin, which contains as many as 25,000 islands, over one-half the world's total. The regional name of the Pacific Islands is appropriate: Oceania, a sea of islands, including those of Alaska and Hawaii. The Pacific Basin is not insignificant or remote. It covers one third of the globe's surface. Its northern boundary is the Aleutian Islands chain. Oceania virtually touches all in the Western hemisphere.⁵

As part of this great global feature, the physical geography of the Aleutian Islands is truly unique. Many earth scientists believe the "Aleutian arc is one of the most striking physiographic features on earth." Its suboceanic trench reaches from Kamchatka to the Gulf of Alaska. The exposed Aleutian ridge joins North America's highest mountains, the Alaska Range. Far from being on a frigid outer rim of the earth, this arc of islands links vital expanses. It is a dividing island chain between the cold Bering Sea, the world's third largest sea, and a warmer north Pacific Ocean. The islands act like baleen filters in an interchange of biota between these two bodies of water. Moreover, a cartographic impression of their detachment is myopic. Actually, the islands are anything but isolated, serving instead as ecological bridges to the Kurile Islands and Siberian maritime regions. Closer in, nearly all the Aleutian Chain islands constitute the western edge of the Gulf of Alaska Basin. In a long semi-circle from Great Sitkin Island in the western Aleutians, the Chain is bounded on the northeast by Cook Inlet, then bends south to include the Alexander Archipelago. Alaska's major population center, Anchorage, and the state capital, Juneau, both lie within this Basin, which is really Alaska's significant underbelly.⁶

The Aleutian region claims many economic as well as aesthetic treasures. Those who know the islands are struck by their natural beauty and the abundance of life found there. For centuries, Aleuts have harvested from the rich intertidal zones and the bordering seas. Russians and Americans have taken from the teeming resources of sea mammals and have converted their pelts into boom-time wealth. To naturalist John Muir, the area seemed rather bleak only in the winter and early spring. Otherwise, he found it "remarkably interesting, its wildlife warm, eager, and swarming." Other naturalists, like Henry W. Elliott, for example, were amazed at the area's rare beauty and

"indescribably rich green and golden carpet of circumpolar sphagnum; exquisitely colored lichens." Recently, author John Bockstoce admitted that its vegetation is the "densest, green cover . . . I have ever seen in the North." Similarly, Olaus J. Murie noticed in the wildlife a deep coloration in its birds and foxes. He dubbed the area a "region of giantism" for its jumbo-sized animals. Another researcher, Victor B. Scheffer, was taken by the region's profuse invertebrates and fishes in coastal waters and countless island pools and lakes. On Agattu Island, for instance, Scheffer counted at least two hundred such animals in less than a five-mile radius.⁷

A wholesome and interconnected vitality also made the Aleutians a haven for ancient human communities. Remarkably successful in adaptation, large numbers of Aleuts have enjoyed healthy and extended lives on these islands. Skillful care and maintenance of the environment explain in large part their long, continuous, and rich development. The pre-contact archaeological record is replete with artifacts demonstrating this sustaining relationship between people and the coastal ecosystems.⁸

Europeans first sailing into these waters groped about in frustration and puzzlement. They searched far and wide for the mythical Juan de Gama Land, the Company Land, the *Terra Borealis*, or land in any northerly direction, specifically the North American continent. Vitus Bering is supposed to have called the Aleutians "Obmannui," or "Delusive Islands," probably based on their persistent fog cover which hampered exploration efforts. Because of the climate covering these far-flung islands, studies of the area grew only at a snail's pace, making the Aleutians a special extension of America's "Last Frontier." One island, however, stands out in bold contrast: Amchitka. Because of military development there in World War II and research conducted during the Cold War, Amchitka emerged from the fogs onto the national scene.⁹

Over eons, all islands of the Aleutian Chain were formed by plutonic action spewing forth successive volumes of molten rock from subterranean depths. Born of fire, they are now peaks of a nearly submerged volcanic mountain range. Amchitka is the largest and southernmost island in a group of sixteen islands named *Ostrova Krys'i*, or "Rat Islands," by the Russians. This name seems originally to have come from Aleuts who called these islands *Ayugadak*, or rat, when an accident introduced the species from a shipwreck in the vicinity.¹⁰

Aleuts called Amchitka *Amtschigda*. The Russians translated that to *Ostrov Amchitka*, Amchitka Island. It has been spelled various ways: *Am-*

attshigda, *Amtatka*, *Amtchitka*, and *Amtschtika*. Some believe Bering christened it Saint Makarius or Saint Markiana. Amchitka, the name that stuck, is used also for Amchitka Pass, a fifty-mile-wide stretch of water between the Rat Islands and the Delarof Island group to the east. Geographically, Amchitka is situated north and south between the land masses of Siberia and New Zealand, east and west between Canada and the Kamchatka Peninsula. On the approximate latitude of London, it lies three-fourths of the way out on the Chain, nearly fourteen hundred miles from Anchorage. Amchitka is about forty miles long, nearly five miles at its widest, and looks somewhat like a diminutive Cuba.¹¹

Both its geographical position and natural bounty made Amchitka significant for human occupation over many centuries. Based on its crossroads orientation between Siberia and New Zealand, it seems to have played a role in an iron exchange network with Asian peoples during the Iron Age. Rather than being a backwater isolate, Amchitka, it appears, was associated with the northern Japanese islands and northeast Asian maritime provinces. That it supported a relatively large population is indicated by at least seventy-eight archaeological sites which still remain. According to recent radiocarbon dating, it was first occupied between 3,600 and 4,600 years ago. Artifacts demonstrate an elaborate subsistence economy based on abundant island resources.¹²

Russian fur traders coming into the area after 1741 were drawn there to exploit these resources. In the process, ancient Aleutian Island communities were disrupted and their people diverted from traditional ways. However, Aleuts had confronted aggression and intrusions even before Russian contact. Neighboring indigenous people had long been potential enemies, and the ethnocentric Rat Island people had set themselves apart from others by calling themselves *Qagus* or *Qaxus*, an identification that nobody else could possess.

Although little of the earliest history of Amchitka is known, Russian ships, starting with Petr Bashmakov's voyage in the early 1750s, plied its nearby waters to hunt or trade for fur-bearing animals. Skipper Aleksei Vorb'ev established the first Rat Island base in 1761 and remained there until 1763. An impression of Amchitka was recorded in 1761 by seaman Prokopii Lisenkov, who noted, aside from its Native residents, its cormorants, tufted puffins, horned puffins, auks, and geese. While hunting in the area from 1772 to 1776, the Russian Dimitri Bragin observed sea lions, seals, and sea otters lying on its shores, and wrote, too, that "wild geese breed here." A lucrative catch of 91 sea lions, 642 sea otters, 1,106 foxes, and 8,000 fur seals