



COLD WAR IN ALASKA

A RESOURCE GUIDE
FOR
TEACHERS AND STUDENTS



RB-29 FLYING PAST MT. MCKINLEY, CA. 1948, U.S. AIR FORCE PHOTO.

DANGER



ACTIVE

COLORS, THIS PAGE LEFT, MIRROR THOSE USED IN THE FIRST RADIATION SYMBOL DESIGNED BY CYRILL ORLY IN 1945. THE THREE-WINGED ICON WITH CENTER DOT IS "ROMAN VIOLET," A COLOR USED BY EARLY NUCLEAR SCIENTISTS TO DENOTE A VERY PRECIOUS ITEM. THE "SKY BLUE" BACKGROUND WAS INTENDED TO CREATE AN ARRESTING CONTRAST. ORIGINAL SYMBOL (HAND PAINTED ON WOOD) AT THE LAWRENCE BERKLEY NATIONAL LABORATORY, BERKELEY, CALIFORNIA.

[HTTP://COMMONS.WIKIMEDIA.ORG/WIKI/FILE:RADIATION_SYMBOL_-_JAMES_V._FORRESTAL_BUILDING_-_IMG_2066.JPG](http://commons.wikimedia.org/wiki/File:Radiation_Symbol_-_James_V._Forrestal_Building_-_img_2066.jpg)



U.S. ARMY SOLDIERS ON SKIS, BIG DELTA, ALASKA, APRIL 9, 1952, PI75-163
ALASKA STATE LIBRARY U.S. ARMY SIGNAL CORPS PHOTO COLLECTION.



U.S. Department of the Interior
National Park Service
Alaska Regional Office
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INTRODUCTION

Alaska's frontline role during the Cold War ushered in unprecedented economic, technological, political, and social changes. The state's strategic value in defending our nation also played a key role in its bid for statehood. Since the end of the Cold War, Alaska's role and its effects on the state have received increasing focus from historians, veterans, and longtime Alaskans.

This resource guide is designed to help students and teachers in researching the Cold War in Alaska, and to provide basic information for anyone who is interested in learning more about this unique history. The guide begins with a map of Cold War military sites in Alaska and a brief summary to help orient the reader. A gateway for further research is provided with the selected bibliography and a list of relevant websites and repositories. The guide closes with research suggestions for Alaska Cold War topics as well as with information about some Cold War related places to visit in the United States.

As you read this guide it is important to understand that the Cold War spanned nearly fifty years and was not a typical war. The name "Cold" characterizes the nature of the war which was largely one of diplomatic posturing, embargos, boycotts, economic sanctions, and military build-up. At the same time, the threat of a nuclear attack was very real. While hostilities between the United States and Soviet Union never erupted into direct conflict, Alaska's frontline role was clear. This study guide focuses on that role and how the Cold War impacted Alaska.



OVERHEAD VIEW OF A SOVIET TU-95 "BEAR" BOMBER, MAY 15, 1974, U.S. NAVY PHOTO.

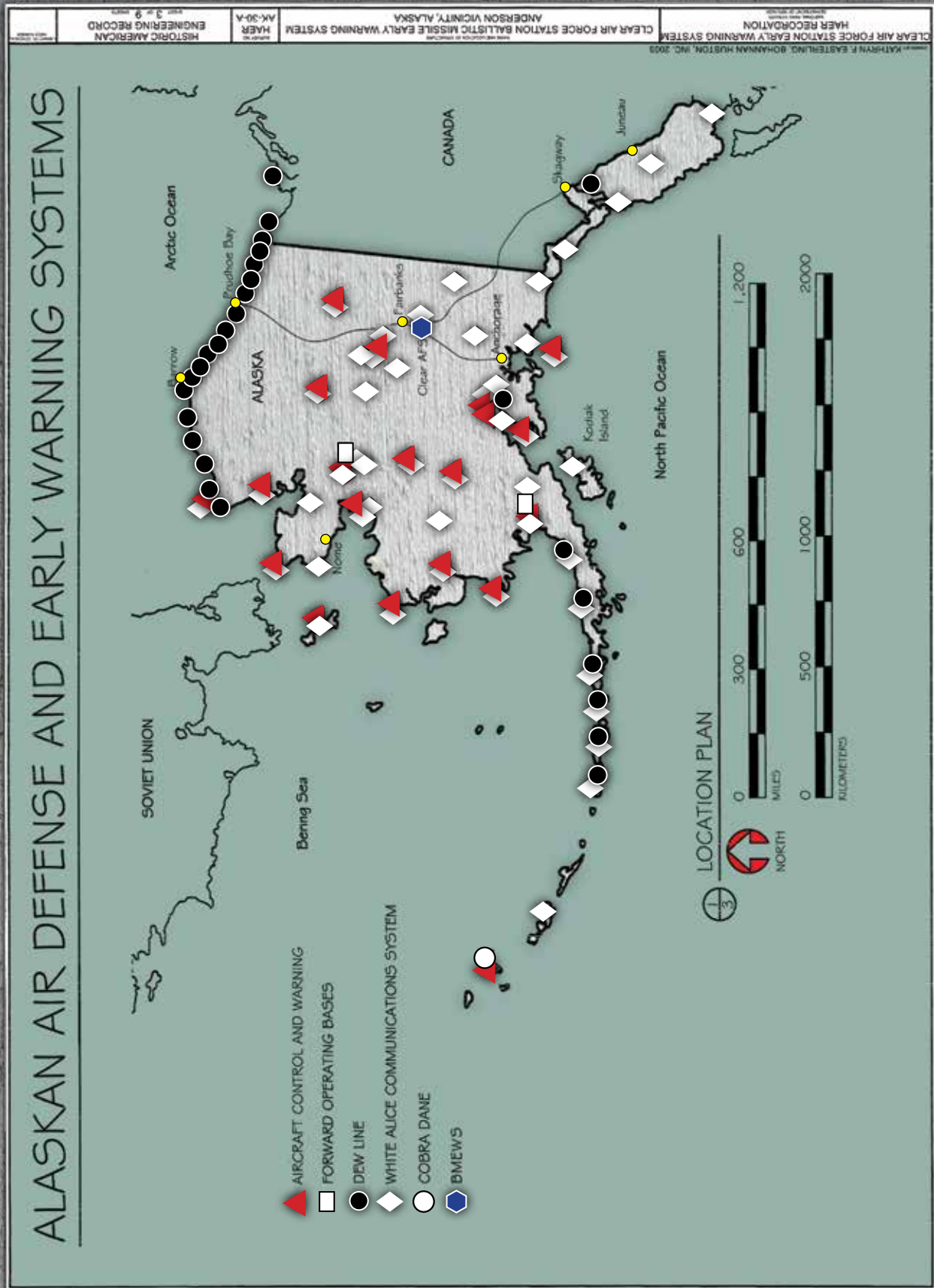
SYNOPSIS

AFTER WORLD WAR II THE WARTIME ALLIANCE BETWEEN THE SOVIET UNION AND UNITED STATES QUICKLY DISSOLVED INTO AN IDEOLOGICAL WAR UNDERScoreD WITH THE THREAT OF NUCLEAR ANNIHILATION. THE COLD WAR AS IT WAS CALLED LASTED NEARLY 50 YEARS AND USHERED IN TREMENDOUS ECONOMIC, TECHNOLOGICAL, POLITICAL, AND SOCIAL CHANGE. FROM 1946 TO 1991 THE UNITED STATES AND THE SOVIET UNION ENGAGED IN AN ARMS RACE THAT INCLUDED THE DEVELOPMENT OF LARGER, EVER MORE POWERFUL NUCLEAR WEAPONS AIMED AT DESTROYING EACH OTHER IN THE EVENT OF WAR.

AS TWO NATIONS LOCATED IN THE NORTHERN HEMISPHERE, ON OPPOSITE SIDES OF THE GLOBE, THE SHORTEST DISTANCE BETWEEN THE UNITED STATES AND THE SOVIET UNION WAS OVER THE NORTH POLE. THIS NATURALLY PLACED ALASKA AT THE FRONTLINES AS U.S. MILITARY PLANNERS DEVELOPED AND IMPLEMENTED DEFENSES AGAINST NUCLEAR ARMED BOMBERS AND LATER, NUCLEAR ARMED MISSILES OF THE SOVIET UNION. CONSTANTLY CHANGING TECHNOLOGY DRIVEN BY THE CONSTANT RACE TO DEVELOP BETTER ARMS AND BETTER DEFENSES AGAINST THOSE ARMS WAS DEMONSTRATED IN ALASKA BY U.S. MILITARY INSTALLATIONS THAT NUMBERED IN THE HUNDREDS. THE PACE OF CHANGE WAS SO RAPID THAT IN SOME CASES PARTIALLY CONSTRUCTED MILITARY INSTALLATIONS WERE ABANDONED WHEN IT BECAME APPARENT THAT THEY WOULD BE OBSOLETE BEFORE THEY WERE EVEN COMPLETED.

—DARRELL LEWIS, HISTORIAN, NATIONAL PARK SERVICE, ALASKA REGIONAL OFFICE





MAP ADAPTED FROM CLEAR AIR FORCE STATION BALLISTIC MISSILE EARLY WARNING SYSTEM ANDERSON VICTORY, ALASKA: HAER RECOGNITION, EASTERLING/HUSTON, INC. 2003

THE IRON CURTAIN DESCENDS

"From Stettin in the Baltic to Trieste in the Adriatic, an iron curtain has descended across the Continent."

—Winston Churchill
5 March, 1945

"Even during the years of the Cold War...we always avoided any direct clash between our civilians and, most certainly, between our military."

—Vladimir Putin



"THE BIG THREE," PRIME MINISTER WINSTON CHURCHILL, PRESIDENT FRANKLIN D. ROOSEVELT, AND MARSHAL JOSEPH STALIN, YALTA, FEBRUARY 1945, U.S.SIGNAL CORPS PHOTO.

COMPETING IDEOLOGIES

At the core of the Cold War were two opposing political and economic systems: Totalitarian Communism and Democratic Capitalism. Each side viewed the others system as a threat to their existence. Between 1946 and 1989 the United States and Soviet Union, and their allies, engaged in a protracted geopolitical contest that involved proxy wars in places like Korea, Vietnam, and Afghanistan, but never erupted into direct open conflict between the two powers.

BEGINNING OF THE COLD WAR



Winston Churchill's "Iron Curtain Speech" at Westminster College in Fulton, Missouri on March 5, 1946 is generally cited as the beginning of the Cold War, although mistrust between the Soviet Union and the United States dated back to the Russian Revolution in 1917. At the Yalta Conference in February 1945 the leaders of Britain, the Soviet Union, and the United States, Winston Churchill, Joseph Stalin, and Franklin Roosevelt, respectively, agreed that occupied Eastern European countries would be reestablished through popular elections. However, Stalin reneged on this promise and left the Russian Army in control of much of Eastern Europe. Elections in Poland, Czechoslovakia, Hungary, Romania, and Bulgaria were cancelled and communist governments installed. Churchill warned about the "Iron Curtain" extending over Eastern Europe in his speech at Westminster College.

BANNER ABOVE: DETAIL, RADAR DISH, THE DISTANT EARLY WARNING LINE (DEW) STATION POW-3, BULLEN POINT, PRUDHOE BAY, ALASKA, LIBRARY OF CONGRESS PRINTS & PHOTOGRAPHS ONLINE CATALOG, HISTORIC AMERICAN BUILDINGS SURVEY, HABS AK-201-4.

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A POLAR THREAT

POLAR CONCEPT



POLAR VIEW SHOWING ALASKA'S PROXIMITY TO THE SOVIET UNION. DAEL DEVENPORT, ALASKA REGIONAL OFFICE, NATIONAL PARK SERVICE.

ALASKA AT THE BEGINNING OF THE COLD WAR

U.S. military planners recognized that a Soviet threat would come from across the North Atlantic and over the Northern Polar Regions, placing Alaska, Canada, Greenland, and Iceland at the frontlines of the Cold War. In response General Carl Spaatz, Commander of the Army Air Forces told his commanders in fall 1946 that development of the Arctic front was to be their primary operational objective.

In 1943, at the height of World War II there were 152,000 active military personnel in Alaska; three years later in 1946, that number had dropped to 19,000. Billions of dollars were spent on defense and infrastructure in

Alaska during the War. At the same time Alaska's major industries; fishing, mining and forestry shut down due to loss of male labor to the War effort, disruption of trade, and an order that closed down gold mining. Alaskan's were concerned that these industries would not recover fast enough to offset decreased defense spending after World War II.

Alaska's infrastructure was woefully inadequate to support the Cold War missions that the U.S. military was planning. Early indicators of this were extreme housing shortages in Anchorage and Fairbanks in the early 1950s as the military could not build housing fast enough to accommodate military families. Despite \$2 billion in investment in infrastructure during World War II, billions more were needed, as existing ports, roads, and railroads were inadequate to get people, equipment, construction materials, and supplies to Cold War installations.

Another U.S. challenge to address the Soviet threat was the need to create new strategically located bases. At the end of World War II Alaska's defenses were focused on fighting a southern foe, not one coming from over the North Pole. Major bases had been constructed along the Aleutian chain and at Kodiak to fight the Japanese, and at Ladd Field near Fairbanks to support the Lend-Lease Program. U.S. General Spaatz's call for the development of the Arctic front was a literal about-face for the military in Alaska. Within a year of the end of World War II the military was preparing for a new enemy, this time coming from the north.



THE BUILDUP



DISTANT EARLY WARNING (DEW) LINE ANTENNAS NEAR NOME, ALASKA, CA. 2013, REBECCA SHAFFER, NATIONAL PARK SERVICE, ALASKA REGIONAL OFFICE.

THE FIFTIES BUILDUP

Military construction changed the face of Alaska during the Cold War. Throughout the 1950s expansion of existing bases, construction of new bases, and a vast infrastructure to connect them occurred at a rapid pace. On August 29, 1949 the Soviet Union shocked the world when it detonated its first atomic bomb at test site in Kazakhstan. It was widely believed that the Soviets would not have an atomic bomb until 1953. Two months later Congress authorized funding for construction of the Aircraft Control and Warning (AC&W) System designed to detect Soviet bombers and dispatch U.S. Air Force fighters to intercept them. From 1951-58, 18 AC&W stations were constructed across Alaska. In June 1950, Soviet supported North Korea invaded U.S. supported South Korea heightening concern about a potential Soviet attack on the United States. It was recognized as early as 1952 that the AC&W system was inefficient and did not provide enough advance warning of an attack. The response was the Distant Early Warning (DEW) Line, constructed between 1954 and 1959. Twenty-four DEW line stations were constructed across northern Alaska and along the Aleutian Chain.



AIR FORCE TAKES COMMAND

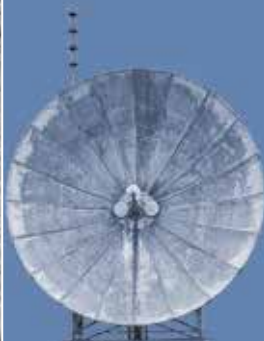


AN F-102 AND A DOG TEAM IN FRONT OF ONE OF THE KODIAK T-HANGARS AT LADD AIR FORCE BASE, FAIRBANKS, CA. 1962, U.S. AIR FORCE PHOTOGRAPH.

In addition to improved detection and communication capabilities Alaska's Air Force bases were expanded and improved to accommodate new and better aircraft, and to carry out new missions. At its height in 1957, 200 fighter aircraft in eight squadrons were stationed in Alaska. Ladd Air Force Base (AFB), near Fairbanks, and Elmendorf AFB, near Anchorage, were split into the northern and southern hubs of Alaska's air defense operations. Throughout the Cold War fighter aircraft in Alaska intercepted more than 300 Soviet bombers off Alaska's coasts.

In October 1946, the headquarters of the Alaska Air Command (AAC) was moved from Adak to Elmendorf Field and on January 1, 1947 the Alaska Command (ALCOM) was formed as one of the military's first unified commands. ALCOM placed the Alaskan Air Command, U.S. Army Alaska, and the Alaskan Sea Frontier under one unified command lead by a U.S. Air Force commander. Following the establishment of the North American Air Defense (NORAD) Command in September 1957, Elmendorf AFB became the headquarters of the Alaska NORAD Region (ANR) in August 1958.

Ladd Air Force Base, near Fairbanks, shifted from the role of supplying World War II Lend-Lease planes to Soviet ally to launching aerial reconnaissance missions against Soviet foe during the early Cold War. Converted B-29s called F-13s and RB-29s (see cover image) flew photo, electronic, and signals reconnaissance missions, some lasting as long as 30 hours, out of Ladd AFB and nearby Eielson AFB beginning in the late 1940s.



NUCLEAR BOMBERS ARRIVE

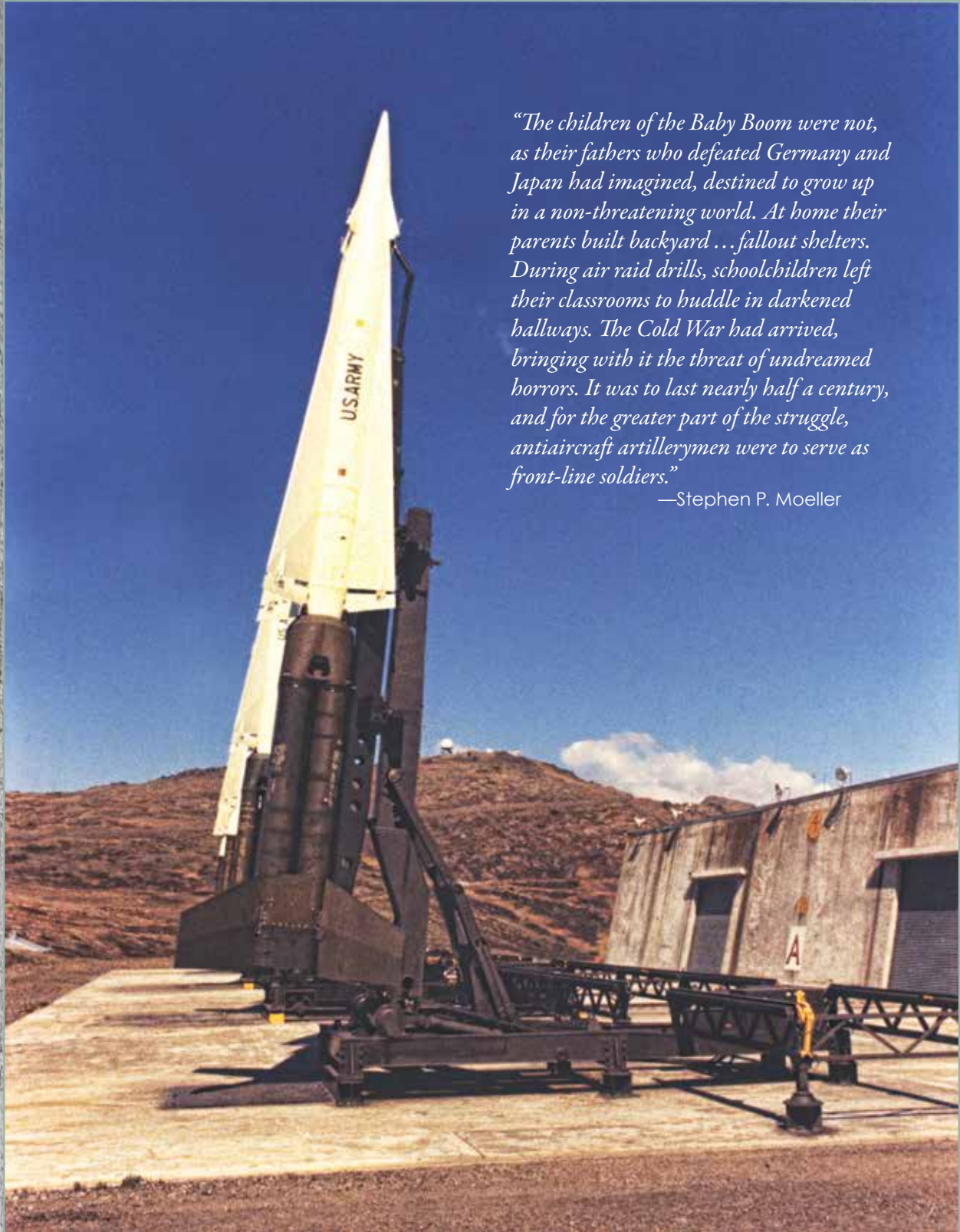


B-36 PEACEMAKER TAKING OFF FROM EIELSON AFB, CA. 1954, 673RD AIR BASE WING HISTORY OFFICE.

In 1948, “Mile 26” base, south of Fairbanks was renamed Eielson AFB and its runway was extended to over 14,500 feet to accommodate the Air Force’s massive B-36 bomber. The B-36 Peacemaker, a six engine bomber capable of carrying a payload of nuclear bombs 10,000 miles, was the largest mass produced piston engine aircraft ever and the largest bomber ever in the U.S. Air Force’s inventory. At the time the runway at Eielson was the longest runway in North America. From the late 1940s through the 1950s Strategic Air Command (SAC) bombers rotated in and out of Eielson AFB regularly.

In addition to the major Air Force bases of Ladd, Elmendorf, and Eielson, smaller Forward Operating Bases (FOB) were established at King Salmon (formerly Naknek Field) and Galena in western Alaska in the early 1950s. Their locations to the west of Elmendorf and Ladd Field provided forward defense for the two bases. As former World War II refueling stops for Lend-Lease planes the Air Force was able to temporarily deploy fighters to both bases as early as 1948. By the mid-1950s fighters were regularly stationed at the bases.





“The children of the Baby Boom were not, as their fathers who defeated Germany and Japan had imagined, destined to grow up in a non-threatening world. At home their parents built backyard . . . fallout shelters. During air raid drills, schoolchildren left their classrooms to huddle in darkened hallways. The Cold War had arrived, bringing with it the threat of undreamed horrors. It was to last nearly half a century, and for the greater part of the struggle, antiaircraft artillerymen were to serve as front-line soldiers.”

—Stephen P. Moeller

NIKE HERCULES MISSILE IN LAUNCH POSITION AT NIKE SITE SUMMIT, CA. JUNE 14, 1976, U.S. ARMY PHOTO.

ARCTIC AIR DEFENSE AND ARCTIC TRAINING

“Do you think when two representatives holding diametrically opposing views get together and shake hands, the contradictions between our systems will simply melt away? What kind of a daydream is that?”

—Nikita Khrushchev

“The Cold War isn't thawing; it is burning with a deadly heat. Communism isn't sleeping; it is, as always, plotting, scheming, working, fighting.”

—Richard M. Nixon

In October 1950, the U.S. Army transferred the lands encompassing the old Fort Richardson and Elmendorf Field to the recently created U.S. Air Force and it became Elmendorf Air Force Base. Approximately 33,000 acres to the north and east of this was retained and a new Fort Richardson was constructed. Fort Richardson became the headquarters for U.S. Army Alaska (USARAK), responsible for ground and air defense; cold weather and mountain warfare training; logistical support of the U.S. Air Force and Navy; National Guard and U.S. Army Reserve training; and internal security, including recovery from a nuclear attack.

In support of its air defense role the U.S. Army installed Nike Hercules missiles around bases at Fairbanks and Anchorage in the late 1950s to replace the antiquated Anti-Aircraft Artillery (AAA) batteries. Nike installations (see preceding page) were placed around cities nationwide. These nuclear capable missiles acted as a last line of defense against Soviet bombers if they evaded U.S. Air Force fighters. Big Delta, constructed as an auxiliary base along the Alaska-Siberia Lend-Lease route near Delta Junction during World War II, was designated an Army post in 1947 and became the Army's Arctic Training Center in 1948. Big Delta was renamed Fort Greely in 1953 and in 1954 construction began on facilities to support its cold weather activities, including the military's first nuclear power plant.

The Naval presence in Alaska during the Cold War reflected the focus on air defense in the military. Unlike the Army and the Air Force there was not a significant naval build-up in the state. The two major naval bases of the Alaskan Sea Frontier were at Kodiak and Adak. Antisubmarine, reconnaissance, search and rescue, and cold weather training activities were carried out from Adak, while air reconnaissance and sea patrols were conducted out of Kodiak, the headquarters of the Alaskan Sea Frontier.

In August 1957, the Soviet Union announced that it had successfully launched its first intercontinental ballistic missile (ICBM). This was followed up in October 1957 with the launch of Sputnik, the world's first artificial satellite. In 1960, Soviet Premier Nikita Khrushchev announced that in the future wars would be fought by launching missiles deep into a country's territory. He followed this up by cutting more than a million Soviet troops and directing the resources toward missile forces. These events caused great concern in the U.S. military about missile tracking capabilities. The U.S. responded by

THE SIXTIES MISSILE THREAT



CHANGING STRATEGIES



AERIAL VIEW OF CLEAR AIR FORCE STATION, BALLISTIC MISSILE EARLY WARNING SYSTEM SITE (BMEWS), CA. JULY 5, 1962, LIBRARY OF CONGRESS PRINTS AND PHOTOGRAPHS DIVISION, HABS/HAER/HALS COLLECTION.

constructing the Ballistic Missile Early Warning System (BMEWS) at Clear, 60 miles south of Fairbanks in 1958-60 as well as a Missile Identification, Detection, and Alarm System (MIDAS) site on Fort Greely in 1959-60.

Changing strategies ended regular rotations of Strategic Air Command (SAC) bombers at Eielson AFB. The basing of ICBMs in the continental United States (CONUS) and the Soviet Union's turn toward land and submarine based ICBMs decreased the need for Alaska's defenses. Instead of being the first line of defense against squadrons of Soviet bombers Alaska became critical for early detection and warning of incoming ICBMs. Strategic reconnaissance continued to be an important mission for Eielson.

The threat of a Soviet ICBM attack, however, did not mean the end of the strategic bomber. The United States and Soviet Union both maintained significant bomber forces and Soviet bombers tested Alaska's defenses throughout the Cold War. Better fighter aircraft, however, meant that fewer were needed to carry out the air defense mission. By 1960, forty-three fighter aircraft were based in Alaska, down from a high of 200 just three years earlier.



FORCE REDUCTION

SEVENTIES FORCE REDUCTIONS

With the beginning of the Vietnam War in the mid-1960s Alaska became an important refueling stop for military flights to and from Southeast Asia. By 1969, C-141 Starlifter cargo aircraft were landing at Elmendorf AFB at a rate of 1,000 - 1,200 per month. In 1970, the C-5 Galaxy, the U.S. Air Force's largest cargo plane also began making refueling stops at Elmendorf AFB.

Budget cuts and better technology lead to decreased manpower in the 1970s. After peaking at 50,000 in the mid-1950s the number of active duty military in Alaska decreased steadily throughout the 1960s and 1970s. In 1969, active duty military numbered around 32,000 and by 1979 that number had decreased to fewer than 24,000. During the 1950s and 1960s Alaska had been fortified to address the Soviet bomber and missile threats. Forward Operating Bases were constructed in western Alaska in the 1950s to shorten the response time for intercepting Soviet bombers. When ICBMs became the paramount threat in the 1960s early warning radar sites were constructed in interior Alaska to provide advance warning of incoming missiles.

As a result of the U.S. reduced defense spending and technological advances, all of the Aleutian DEW Line stations and their accompanying communications facilities were closed by 1979. A number of radar facilities were automated in the 1970s decreasing the need for personnel and to maintain expensive supply operations. All Fairbanks Nike Missile sites were closed in 1970-71, and one of the Anchorage sites was closed in 1970. Closure of Alaska Nike sites was part of a Nike deactivations nationwide, in part as an acknowledgement that ICBMs had rendered them obsolete and as part of budget cuts.

EIGHTIES: BUILD-UP TO THE END

President Ronald Reagan came into office in 1980 declaring a policy of peace through strength in dealing with the Soviet Union. With this he initiated a massive military buildup, which included the placement of intermediate-range nuclear missiles in Europe, force modernization, and the Strategic Defense Initiative (SDI) aimed at researching and developing technologies to defend against ICBMs.

Joint training exercises that occurred almost annually in the 1960s, and decreased sharply in the 1970s, became commonplace again in the 1980s. One of the most important training exercises in Alaska, the BRIM FROST winter exercises, involved every branch of the U.S. military and took place in every odd-numbered year beginning in 1981 at Fort Greely.



TENSIONS THAW



U.S. AIR FORCE F-15 "EAGLE," 12TH FIGHTER SQUADRON, ELMENDORF AIR FORCE BASE, SHADOWS A SOVIET TUPOLEV "BEAR" BOMBER (TU-95S) NEAR THE WESTERN COAST OF ALASKA, U.S. AIR FORCE PHOTO, SEPTEMBER 28, 2006.

As part of force modernization, Alaska received F-15s in 1982. The F-15s were the most modern fighter in the U.S. inventory at the time. It was the first U.S. Air Force fighter in more than thirty years designed specifically for the role of interception and air combat. Modernization also came in the form of new and better computer systems which linked Alaska's vast Cold War defense network to the command center on Elmendorf AFB. An interesting outcome of modernization was the establishment of a rail-based alternate command center in 1982. Made of remodeled surplus Alaska Railroad cars the alternate command center included accommodations and communications.

During the last decade of the Cold War some of the greatest tension between the Soviet Union and United States took place in Alaska. Over half of all the intercepts of Soviet aircraft that took place from Alaska military bases took place during the 1980s. On September 1, 1983 a Korean Airlines flight en route to Seoul, after a refueling stop in Anchorage, was shot down by Soviet fighters when it strayed into restricted Soviet airspace. All 269 passengers aboard the Boeing 747 were killed. It was later discovered that the Soviet military had mistaken the passenger plane for an RC-135 surveillance plane that had been flying near the restricted airspace.

As political relations between the Soviet Union and United States improved in the late 1980s, Alaska was the first to experience the thaw in the Cold War. On August 6, 1989 two MIG-29 fighter aircraft and an AN-225 cargo aircraft made a refueling stop at Elmendorf AFB en route to an airshow in Canada. This was the first time since World War II that a Soviet military aircraft had made such a landing in Alaska.



LEGACY OF THE COLD WAR IN ALASKA

“On March 11, 1985, Mikhail Gorbachev became leader of the Soviet Union, and within a few weeks the full-scale reformation he attempted to carry out both inside his country and in its cold war relations with the West, particularly the United States, began to unfold.”

—Stephen Cohen

“Strategic thinkers were naturally rattled to find this outsider fooling around with their work. They had been thinking strategically when Reagan was just another movie actor playing opposite a chimpanzee, for heaven’s sake. They think Reagan is too naive, too innocent, to grasp the intellectual complexities of cold war strategy.”

—Russell Baker



PRESIDENT REAGAN AND MIKHAIL GORBACHEV POSE BY A PIECE OF THE BERLIN WALL, MAY 4, 1992, RONALD REAGAN PRESIDENTIAL LIBRARY.

On June 12, 1987, President Reagan, speaking in front of the Brandenburg Gate in Berlin, West Germany challenged Soviet leader Mikhail Gorbachev in his famous statement, “Mr. Gorbachev, tear down this wall.” Two years later on November 9, 1989 the Berlin Wall, which had separated East and West Germany for nearly 40 years began to come down, marking the beginning of the end of the Cold War. Two years later the Soviet flag, which had flown over the Kremlin in Moscow since 1923, was replaced by the flag of the Russian Federation.

Alaska played a critical role in helping to defend our nation during the Cold War. The shortest distance between the United States and the Soviet Union was over the North Pole, placing Alaska at the front lines. Alaska’s strategic, military importance helped cement its bid for statehood. The economic, social, and political impacts of the Cold War on Alaska continue to be felt today.



ALASKA ACHIEVED STATEHOOD ON JANUARY 3, 1959. MILITARY PERSONNEL ARE SHOWN CARRYING THE 49TH STAR FLAG DURING THE 4TH OF JULY PARADE IN ANCHORAGE.



SIDNEY H. HAMILTON, SIDNEY HAMILTON PHOTOGRAPH COLLECTION: ANCHORAGE MUSEUM, GIFT OF EMILY TURNER. B1976.082.129.

MUTUALLY ASSURED DESTRUCTION (M.A.D.)

Throughout most of the Cold War, the U.S. military strategy toward the Soviet Union was known as Mutually Assured Destruction or M.A.D. As missiles began to replace bombers as the primary method for delivering nuclear weapons in the late 1950s, it became clear that the United States would not be able to defend itself against such an attack. While anti-aircraft missiles and fighter aircraft could shoot down a nuclear armed bomber there was no such defense against an intercontinental ballistic missile (ICBM). Throughout the Cold War the United States and Soviet Union raced to develop ever more powerful nuclear warheads for their missiles. While the “Fat Man” atomic bomb dropped on Nagasaki, Japan (which ended World War II), had an explosive capacity equivalent to approximately 20,000 tons of TNT, the largest of the U.S. and Soviet nuclear weapons measured their potency in millions of tons of TNT. The consequences of a nuclear war between the Soviet Union and United States would have been devastating. Hundreds of millions of people dying instantly, large areas of the planet becoming uninhabitable, and the skies blackened with debris and smoke for an extended period of time. The scale of such an event would have been felt globally in the form of radioactive fallout and crop failures. Since there was no way to stop an incoming missile, this MAD promise of an equally destructive retaliatory strike was the only defense against a nuclear war. MAD was the norm between the United States and Soviet Union for more than 30 years, holding the entire world in its grip.





“We do not want a war. We do not know whether there will be war. But we know that forces hostile to us possess weapons that could destroy us if we were unready. These weapons create a new threat—radioactive fallout that can spread death anywhere. That is why we must prepare.”

—*The Family Fallout Shelter*,
United States Office of Civil and Defense mobilization, 1959

LEFT: THE ADVERTISEMENT COUNCIL PRODUCED THIS PUBLIC SERVICE ADVERTISEMENT IN 1953 WHICH PROVIDED A LIST OF BASIC FIRST-AID ITEMS FOR PEOPLE TO HAVE ON HAND IN THE EVENT OF A NUCLEAR ATTACK, NATIONAL ARCHIVES AND ADMINISTRATION WEBSITE AT: [HTTP://WWW.ARCHIVES.GOV/EDUCATION/HISTORY-DAY/ONLINE.HTML](http://www.archives.gov/education/history-day/online.html)

“The shelter business is booming like a 25-megaton blast.”

—*Popular Science*, December, 1961



HTTP://WWW.SMITHSONIANMAG.COM/SMITHSONIAN-INSTITUTION/HOW-A-FALLOUT-SHELTER-ENDED-UP-AT-THE-AMERICAN-HISTORY-MUSEUM-93448257/?NO-IST

ABOVE: SUBTERRANEAN FALLOUT SHELTER EXHUMED BY THE NATIONAL MUSEUM OF AMERICAN HISTORY (NMAH) FROM FRONT LAWN OF PRIVATE RESIDENCE, FORT WAYNE, INDIANA. THIS 1955 STEEL SHELTER (ORIGINALLY MANUFACTURED BY MARTIN ENTERPRISES) CONTAINED FOUR DROP-DOWN BEDS, A CHEMICAL PIT TOILET, AND HAND CRANKED AIR EXCHANGER. (ORIGINAL COST, INCLUDING INSTALLATION 15 FEET BELOW GROUND LEVEL: \$1,800) IN 1961, THE UNIT WAS REINTERRED IN THE LAWN BECAUSE GROUND WATER HAD FORCED IT TO RISE ABOVE THE SURFACE. UNTIL NOVEMBER 2011, THE EXCAVATED SHELTER WAS ON DISPLAY AT THE NMAH "SCIENCE IN AMERICAN LIFE" EXHIBITION AND STAGED WITH COLD WAR-ERA ARTIFACTS.

FALLOUT SHELTER SYMBOL, [HTTP://EN.WIKIPEDIA.ORG/WIKI/FALLOUT_SHELTER](http://en.wikipedia.org/wiki/Fallout_Shelter) ➡

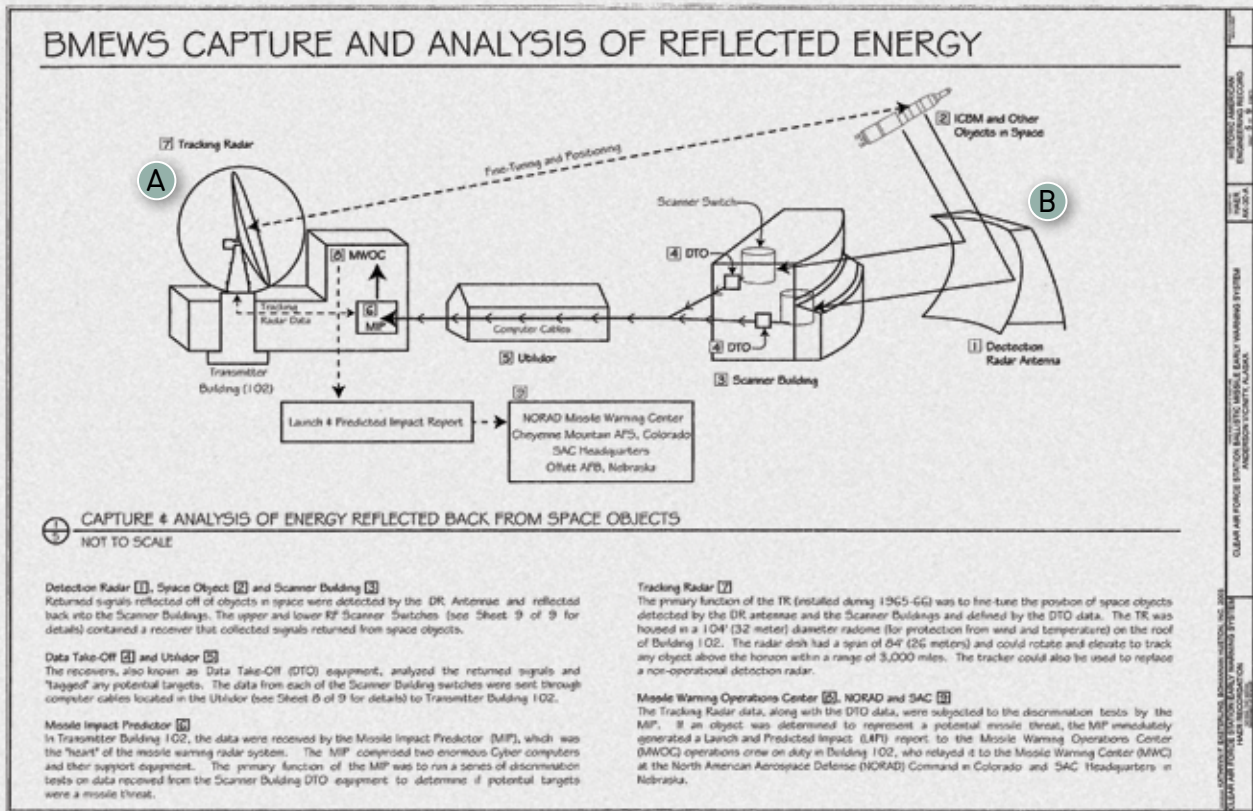


LEFT: DURING THE COLD WAR, THE FEDERAL CIVIL DEFENSE ADMINISTRATION USED IMAGES SUCH AS THIS ONE, TO ILLUSTRATE AN ATOMIC ATTACK'S IMPACT ON AN AMERICAN CITY. THIS WAS PART OF AN EFFORT TO TRY TO REDUCE ALARM AND TO HELP AMERICANS PREPARE FOR SURVIVING A NUCLEAR ATTACK.

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THIS DRAWING OF THE BALLISTIC MISSILE EARLY WARNING SYSTEM (BMEWS) AT CLEAR AIR FORCE STATION PROVIDES A VISUAL EXPLANATION OF HOW THE BMEWS SYSTEM WAS EXPECTED TO WORK - RADAR AND SCANNERS WOULD DETECT AND TRACK AN INCOMING MISSILE, PREDICTING ITS IMPACT AS WELL AS RELAYING THE INFORMATION TO APPROPRIATE AIR DEFENSE CENTERS OUTSIDE OF ALASKA, LIBRARY OF CONGRESS, HISTORIC AMERICAN BUILDINGS SURVEY, CLEAR AIR FORCE STATION, BALLISTIC MISSILE EARLY WARNING SYSTEM SITE II, AK-30-A-100.



DURING THE 1960s, THE U.S. AIR FORCE RESPONDED TO THE EMERGING THREAT OF AN INTERCONTINENTAL BALLISTIC MISSILE ATTACK FROM THE SOVIET UNION BY IMPLEMENTING A NEW TYPE OF RADAR DETECTION SYSTEM. THREE BALLISTIC MISSILE EARLY WARNING SYSTEM (BMEWS) SITES WERE BUILT: ONE IN GREENLAND, ONE IN THE UNITED KINGDOM, AND ONE AT CLEAR, ALASKA. SHOWN IS THE TRACKING RADAR RADOME UNDER CONSTRUCTION AT CLEAR AIR FORCE STATION WITH CRANE ASSEMBLY AND WORKERS, ORIGINAL RADOME, RCA SERVICES COMPANY 2 OCTOBER, 1965, PHOTOGRAPHIC SERVICES, RIVERTON, NJ, NEGATIVE NO. A-6705; LIBRARY OF CONGRESS, HISTORIC AMERICAN BUILDINGS SURVEY, CLEAR AIR FORCE STATION, BALLISTIC MISSILE EARLY WARNING SYSTEM SITE II, AK-30-A-100.

ABOVE AND BELOW: (A): TRACKING RADAR; (B) DETECTION RADAR.

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THE WHITE ALICE COMMUNICATIONS SYSTEM (WACS) CONSISTED OF 71 RADIO STATIONS CONSTRUCTED ACROSS ALASKA BETWEEN 1955 AND THE LATE 1960S. WACS WAS THE BACKBONE OF COMMUNICATIONS BETWEEN DEW LINE STATIONS, FORWARD OPERATING BASES, AND BMEWS SITES AND COMMAND AND CONTROL CENTERS FOR NEARLY 20 YEARS. IT WAS A TROPOSPHERIC SCATTER COMMUNICATIONS NETWORK, MEANING THAT RADIO SIGNALS WERE TRANSMITTED INTO THE UPPERMOST PART OF THE TROPOSPHERE ABOUT SEVEN MILES UP WHERE THEY SCATTERED AND BOUNCED BACK TO EARTH. RECEIVING STATIONS HUNDREDS OF MILES AWAY WOULD PICK UP THE SIGNALS AND RETRANSMIT THEM.

WHITE ALICE COMMUNICATIONS SITE UNDER CONSTRUCTION AT COLD BAY, ALASKA, SEPTEMBER 6, 1957.

WEBSITES

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National Museum of the Air Force. <http://www.nationalmuseum.af.mil/>.

Nike-Hercules Alaska. <http://www.nikealaska.org/>.

Nike Historical Society. <http://nikemissile.org/>.



THE AN/FPS-108 COBRA DANE RADAR SYSTEM ON SHEMYA ISLAND BECAME OPERATIONAL IN 1977 AND WITH NUMEROUS UPGRADES CONTINUES TO OPERATE. DURING THE COLD WAR THE COBRA DANE RADAR SYSTEM CARRIED OUT THREE CRITICAL MISSIONS: DATA COLLECTION FOR BALLISTIC MISSILE TREATY VERIFICATION, EARLY WARNING, AND SPACE SURVEILLANCE. AMAZINGLY, WHILE COBRA DANE HAS UNDERGONE VARIOUS HARDWARE AND SOFTWARE UPGRADES, THE RADAR FRONT END, AS PICTURED HERE OCTOBER 23, 1984, HAS NOT BEEN REPLACED, USAF PHOTOGRAPH, [HTTP://COMMONS.WIKIMEDIA.ORG/WIKI/FILE%3ACOBRA_DANE_SECURITY_PATROL.JPG](http://commons.wikimedia.org/wiki/File%3ACOBRA_DANE_SECURITY_PATROL.JPG)



VIEW OF DATA AND ANALYSIS CONSOLE SHOWING CLOCK AND MISSILE IMPACT PREDICTOR TIME. LOCATED IN TRANSMITTER BUILDING NO. 102 AT THE CLEAR AIR FORCE STATION, BALLISTIC MISSILE EARLY WARNING SYSTEM (BMEWS), CA. 2001, LIBRARY OF CONGRESS, HISTORIC AMERICAN ENGINEERING SURVEY, HAER AK-30-A-35.

REPOSITORIES

Repositories

Alaska's Digital Archives. Alaska's Digital Archives is an online source of digital photos, interviews, and videos on topics relating to Alaska's history. <http://vilda.alaska.edu/index.php>.

Alaska Resource Library & Information Services (ARLIS). ARLIS is located on the University of Alaska Anchorage campus adjacent to the Consortium Library. It is a major repository for reports from government agencies located in Alaska. The collection may be searched via their website, <http://www.arlis.org/>.

Alaska State Library. The Alaska State Library, located in Juneau, is a repository of digital and physical sources available online or through interlibrary loan. The collection may be searched via their website, <http://library.alaska.gov/>.

Elmendorf AFB history office, 10427 Kuter Avenue, Suite 320, Elmendorf AFB, Alaska. The Elmendorf history office is responsible for recording annual histories, maintaining an archive of previous histories and responding to requests for information from service members and the general public. Their

research dates back to 1867 when the United States bought Alaska from the Russians and established a military government over the territory. Requests may be made by contacting the office at (907) 552-9768.

Statewide Library Electronic Doorway (SLED). SLED was developed by the Alaska State Library and the Elmer E. Rasmuson Library, University of Alaska Fairbanks to provide easy access to electronic information. It may be accessed via the SLED website, <http://sled.alaska.edu/>.

UAA Consortium Library Archives & Special Collections Department. The Archives and Special Collections Department is located on the third floor of the Consortium Library in Room 305, on the University of Alaska Anchorage campus. The Department has a large collection of Alaska Cold War documents on topics including the DEW Line, White Alice Communication system, BMEWs, and the Alaska Air Command. The collection may be searched via their website, <http://consortiumlibrary.org/archives/index.php>.



SOLDIERS WITH ARMS MARCHING IN FUR RENDEZVOUS PARADE ON 4TH AVENUE IN ANCHORAGE, ALASKA, FEBRUARY 22, 1958.

LELAND A. OLSON PAPERS, ARCHIVES AND SPECIAL COLLECTIONS, CONSORTIUM LIBRARY, UNIVERSITY OF ALASKA ANCHORAGE, PHOTOGRAPH.

SELECTED TOPICS IN COLD WAR HISTORY

Selected Topics in Alaska Cold War History

Alaska, Siberia Friendship Flight
Alaska Statehood and the Cold War
Amchitka Underground Nuclear Testing
Arctic Ice Islands
Ballistic Missile Early Warning (BMEW) radar
Cold Weather Testing
Cold Weather Training
Arctic Engineering
Cool Barge Resupply Operations

Distant Early Warning (DEW) Line
Early Cold War Aerial Reconnaissance and Polar Navigation Missions
Eskimo Scouts
Nike Hercules Missile in Alaska
Project Chariot
Shoot Down of Korean Air Lines 007
U.S. Air Force Medical Experiments on Alaska Natives



U.S. ARMY PHOTOGRAPH, WILLIAM A. EGAN PAPERS, UAF-1985-120-474, ARCHIVES, UNIVERSITY OF ALASKA FAIRBANKS.

A FEBRUARY 19, 1966 AWARD CEREMONY, AS DESCRIBED IN THE PHOTOGRAPH CAPTION, "ESKIMO SCOUTS RECEIVED AWARDS SATURDAY FROM ALASKA GOVERNOR WILLIAM A. EGAN (LEFT). GOV. EGAN PREPARES TO PRESENT THE EISENHOWER TROPHY FOR THE STATE'S MOST OUTSTANDING NATIONAL GUARD UNIT TO SGT. GEORGE WHITMAN, MEKORYUK, REPRESENTING CO. B, 2ND SCOUT BATTALION. ALSO RECEIVING AWARDS WERE 1ST SGT. THEODORE BOOTH, KOTZEBUE, FOR THE OUTSTANDING TRAINING RECORD SET BY CO. C, 1ST SCOUT BATTALION; SGT. ALBERT V. LEE, NOME, THE BRIGADIER GENERAL JOHN R. NOYES MEDAL AS OUTSTANDING MEMBER OF THE 1ST SCOUT BATTALION; AND PFC GEORGE NECK, KASIGLUK, NOYES MEDAL AS OUTSTANDING MEMBER OF THE 2ND SCOUT BATTALION. PRESENTATIONS WERE MADE DURING THE ANNUAL GOVERNOR'S DAY REVIEW BY 1ST AND 2ND SCOUT BATTALIONS, 297TH INFANTRY, ALASKA NATIONAL GUARD, AT FORT RICHARDSON."

LEARN MORE



NIKE SITE SUMMIT, 2011, DARRELL LEWIS,
NATIONAL PARK SERVICE PHOTOGRAPH.

Nike Site Summit

Joint Base Elmendorf-Richardson, Anchorage, Alaska

Restricted Access. For tours, contact Friends of Nike Site Summit at: <http://www.nikesitesummit.net/>

Alaska's Site Summit: Cold War Defense and its Legacy in the North Teaching with Historic Places lesson plan:

<http://www.nps.gov/history/nr/twhp/wwwlps/lessons/153sitesummit/153sitesummit.htm>



BLAST DOOR, AS PAINTED BY AIR FORCE PERSONNEL,
AT THE LAUNCH CONTROL FACILITY, ELLSWORTH AIR
FORCE BASE, DELTA FLIGHT, LIBRARY OF CONGRESS,
HISTORIC ENGINEERING SURVEY, HAER SD-50-A-87.

Nike Missile Site SF88

Golden Gate National Recreation Area, California - <http://www.nps.gov/goga/nike-missile-site.htm>

The Nike Historical Society; <http://www.nikemissile.org/ColdWar/whatwehave/>



HM69 Nike Missile Base

Everglades National Park, Florida; <http://www.nps.gov/ever/historyculture/hm69.htm>



Minuteman Missile National Historic Site

South Dakota - <http://www.nps.gov/mimi/index.htm>

The Minuteman was one of the most significant strategic weapons in U.S. history. With the turn of a key, the missile could deliver its nuclear weapon to a Soviet target in 30 minutes or less. For nearly three decades Ellsworth's 44th Missile Wing stood on alert. Today, visitors are invited to learn about the Cold War and to tour the Launch Facility Delta-09.



Minuteman Missile National Historic Site: Protecting a Legacy of the Cold War Teaching with Historic Places lesson plan: <http://www.nps.gov/nr/twhp/wwwlps/lessons/128mimi/>

Titan Missile Museum

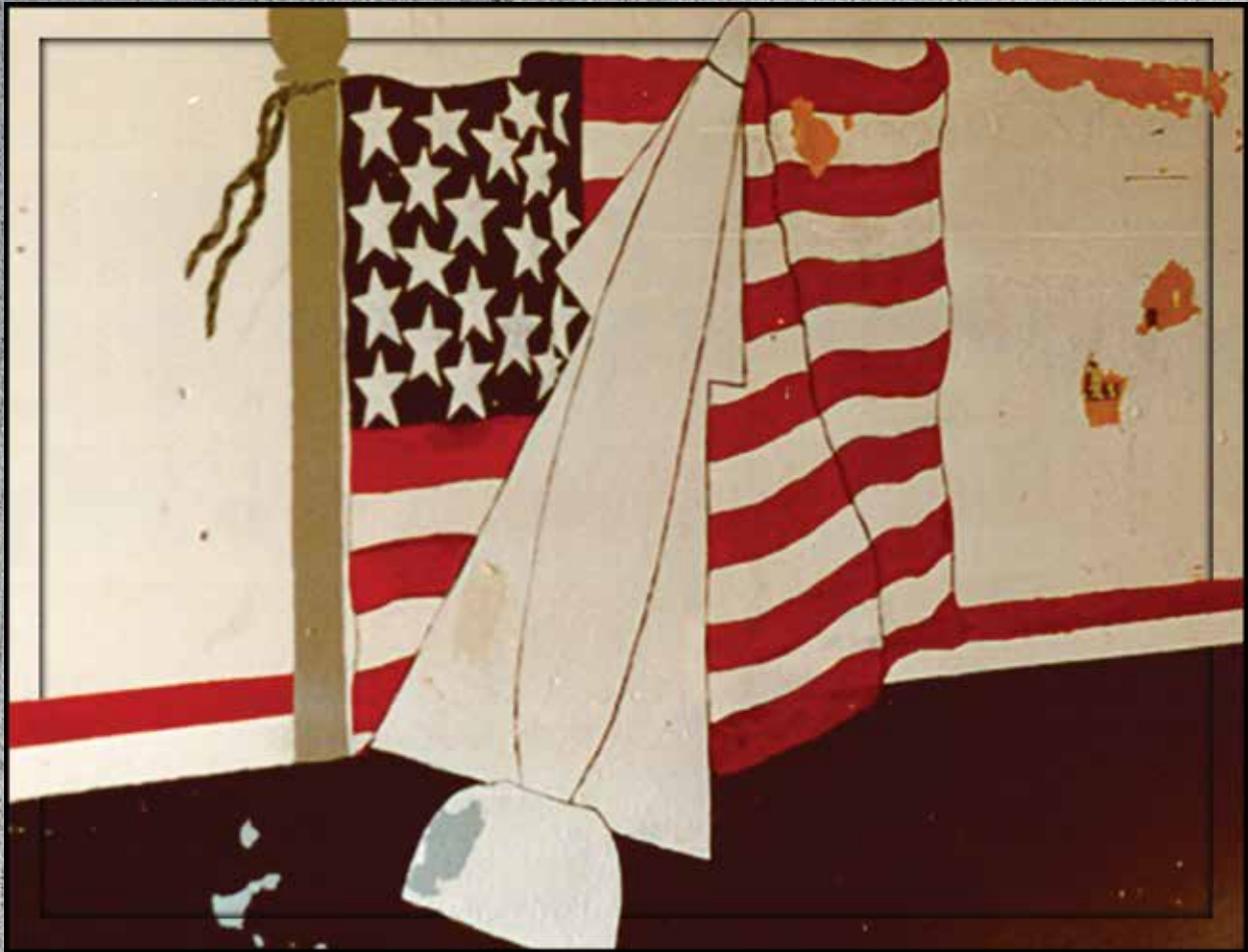
Arizona - <http://www.titanmissilemuseum.org/index.php?pg=1>

Air Force Facility Missile Site 8 National Historic Landmark

Between 1963 and 1987, 54 Titan II intercontinental ballistic missile (ICBM) complexes were constructed and placed "on alert." Designed to survive a first-strike nuclear attack and to launch warheads, these weapons were America's response to the "missile gap" panic of the late 1950s and early 1960s. This museum complex displays aboveground and belowground command and control facilities, the silo, and the sole remaining Titan II missile.

Air Force Space and Missile Museum

Cape Canaveral, Florida; <http://afspacemuseum.org/>



MURAL OF A NIKE HERCULES MISSILE WITH U.S. FLAG (NO LONGER EXTANT) AT SITE SUMMIT. PHOTO COURTESY OF THE ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY, 2000.