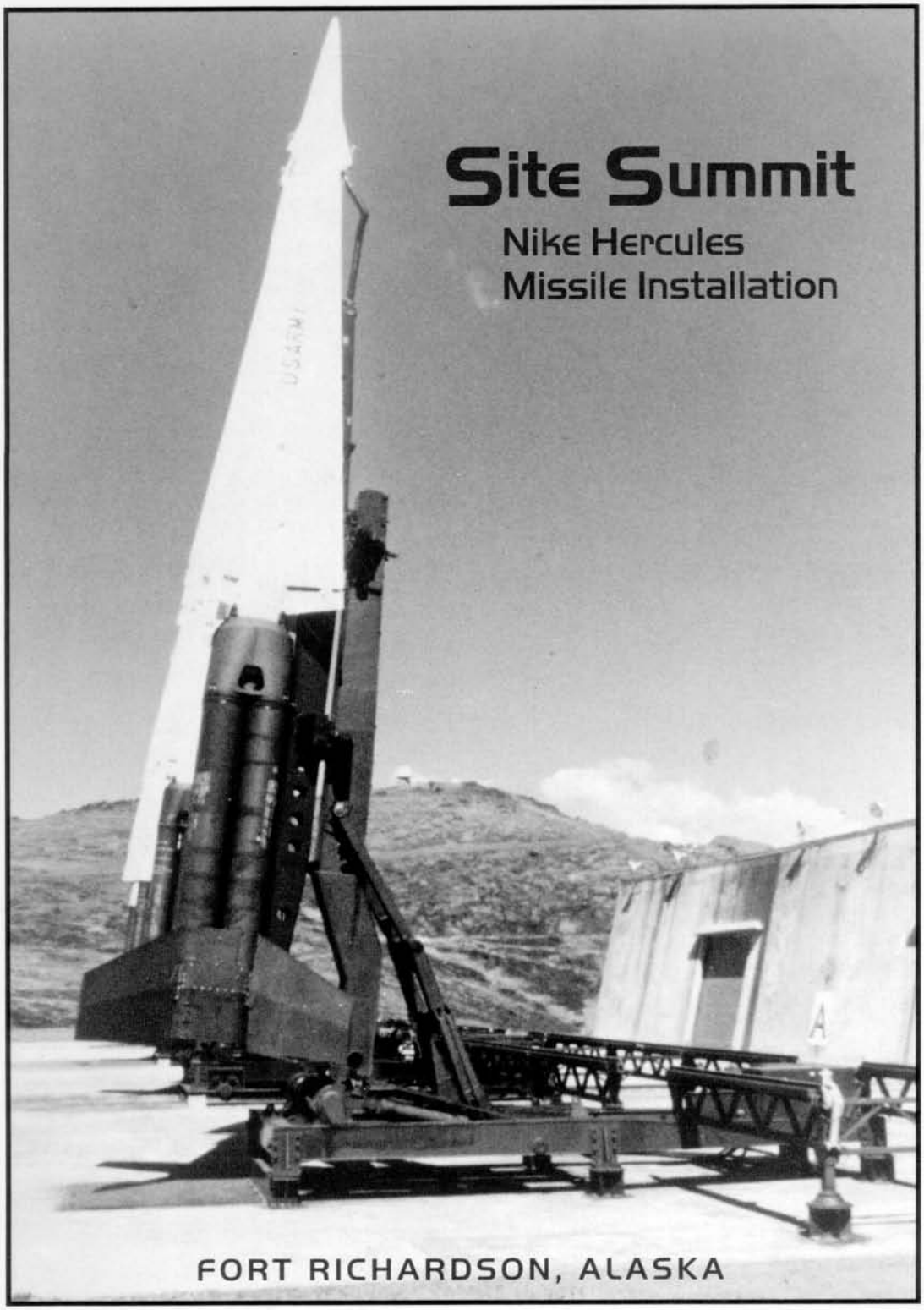

Site Summit

Nike Hercules Missile Installation

FORT RICHARDSON, ALASKA

prepared by the

Alaska Office of History and Archaeology
Department of Natural Resources
3601 C Street, Suite 1278
Anchorage, Alaska 99503-5921

for the

Department of the Army
Headquarters
U.S. Army Alaska
600 Richardson Drive, #6500
Fort Richardson, Alaska 99505-6500
(907) 384-3010

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Cover photo: A Nike Hercules missile in firing position at Site Summit, circa 1960s. (National Archives)

Site Summit Nike Hercules Missile Installation

Site Summit is the last intact Nike Hercules Missile installation in Alaska. This former "guardian of the sky" is in the Chugach Mountains, overlooking the City of Anchorage. Built during the Cold War, Site Summit reminds us of Alaska's military defensive role and how the Army was prepared to defend Fort Richardson, Elmendorf Air Force Base and Anchorage from enemy attack.

Firing the Nike Hercules ***Pilgrim*** *by Battery C, 4th Missile Battalion, 43rd Artillery, during the annual service practice at Site Summit, November 27, 1961. (National Archives)*

A New Type of War

The Cold War (1946-1989) profoundly changed Americans' national and global thinking. Leaving behind its pre-World War II isolationist policy, America moved to contain the Soviet Union and to stop the spread of communism. Events such as the Korean War, Sputnik, the Cuban Missile Crisis, the Vietnam War, and the fall of the Berlin Wall defined the era.

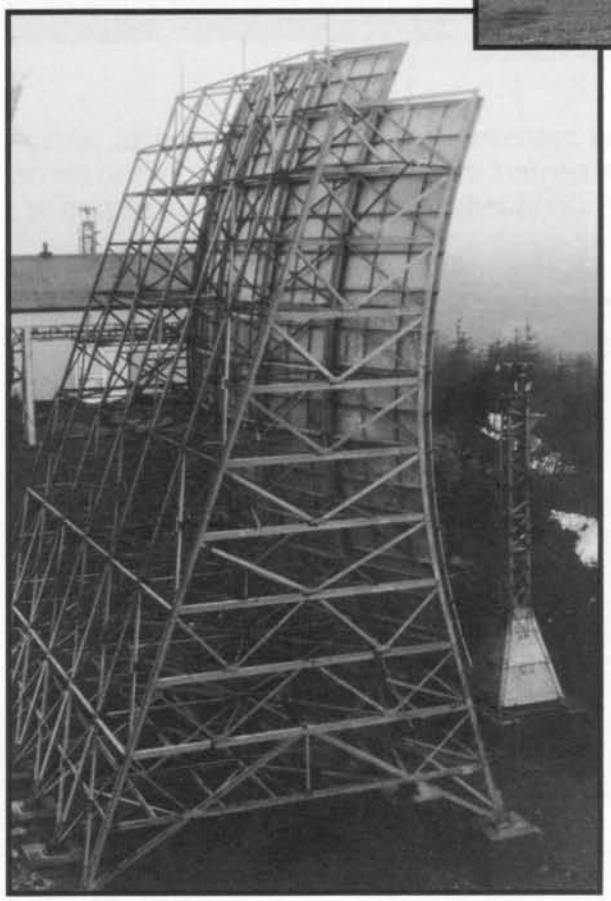
The Cold War was a new type of war, as military strategies involved the use of nuclear weapons. The Soviet Union and the United States raced to develop the long-range Intercontinental Ballistic Missile (ICBM). At times, direct military confrontation between the two countries seemed imminent.

Alaska's geographic proximity to the Soviet Union made it the first line of defense for the United States.

Alaska - An Integral Part of America's Cold War Defense Network

During the Cold War, Alaska's defense network included the Distant Early Warning (DEW) Line radar, the White Alice communication system, the Ballistic Missile Early Warning Site (BMEWS) radar, and the Aircraft Control and Warning stations (AC&W).

DEW Line stations, such as this one at Bullen Point, were part of the early radar warning line constructed across northern Alaska and Canada during the 1950s. 1993. (National Park Service)

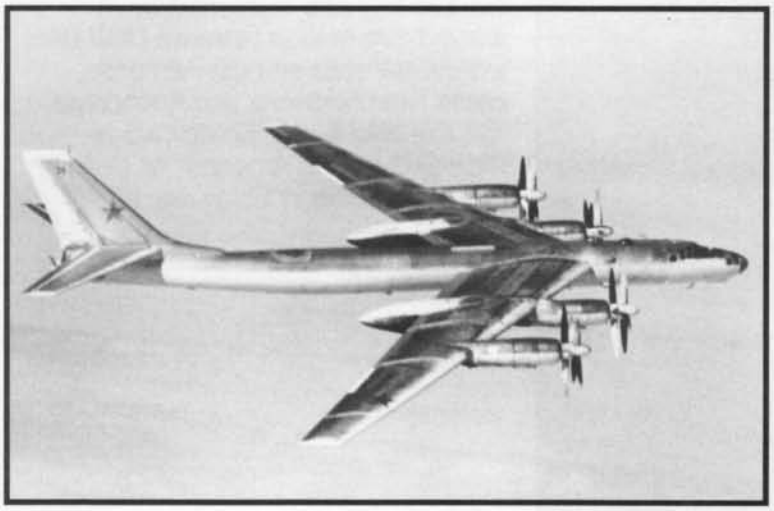


White Alice communication stations, such as this one at Boswell Bay, relayed information between DEW Line and AC&W sites and the Air Force bases near Fairbanks and Anchorage. The line also linked the BMEWS at Clear to the North American Air Defense (NORAD) center in Colorado. 1987.

A Coordinated Response to the Soviet Threat

The NORAD Region Control Center and vertical display board at Elmendorf Air Force Base in the late 1970s. (U.S.A.F.)

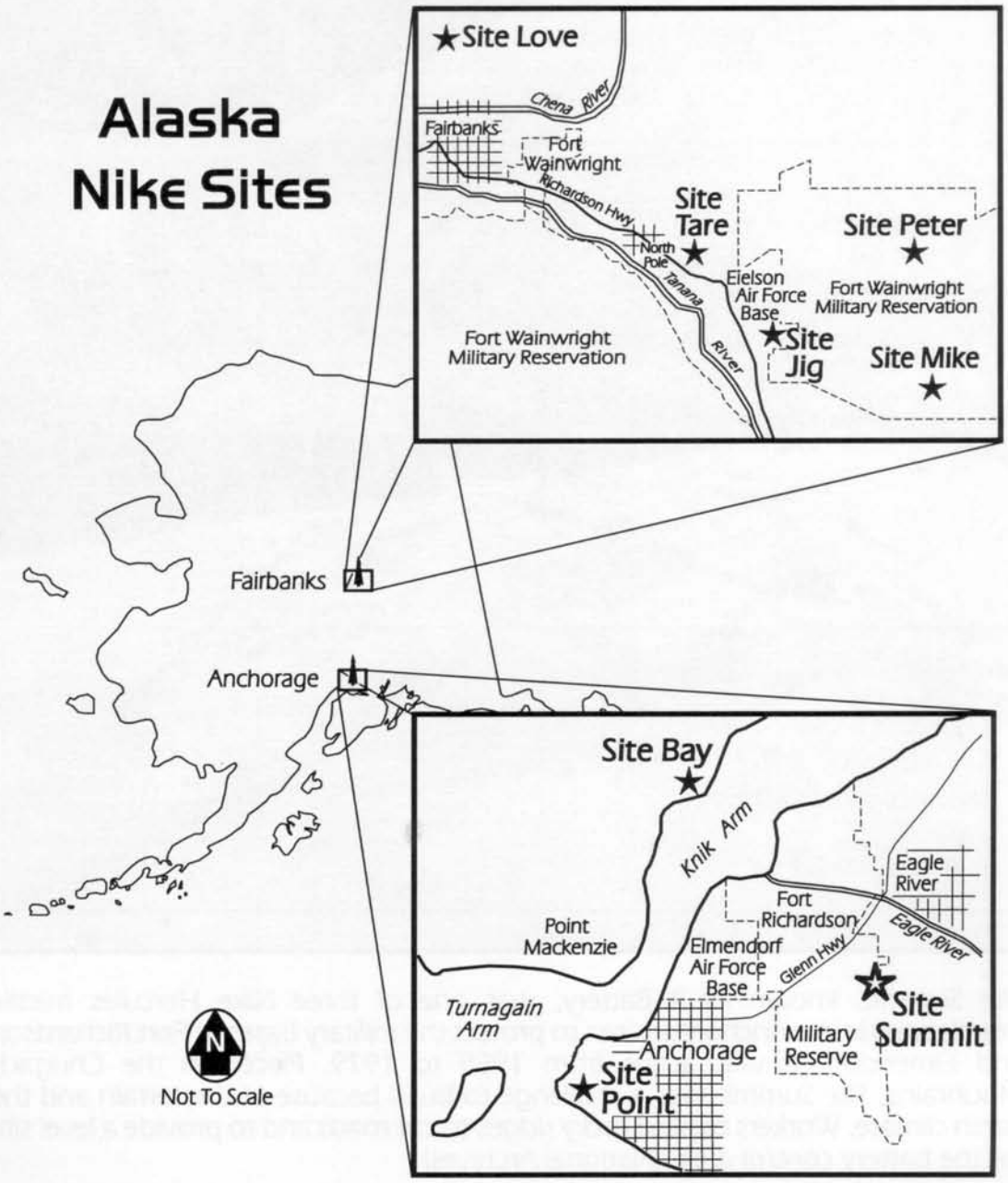
The Alaska radar and communication systems provided information to aircraft control centers, NORAD region control centers in Alaska, and the command center in Colorado. Once enemy aircraft were identified, a coordinated system responded with defense weapons that included air-to-air and surface-to-air missiles.



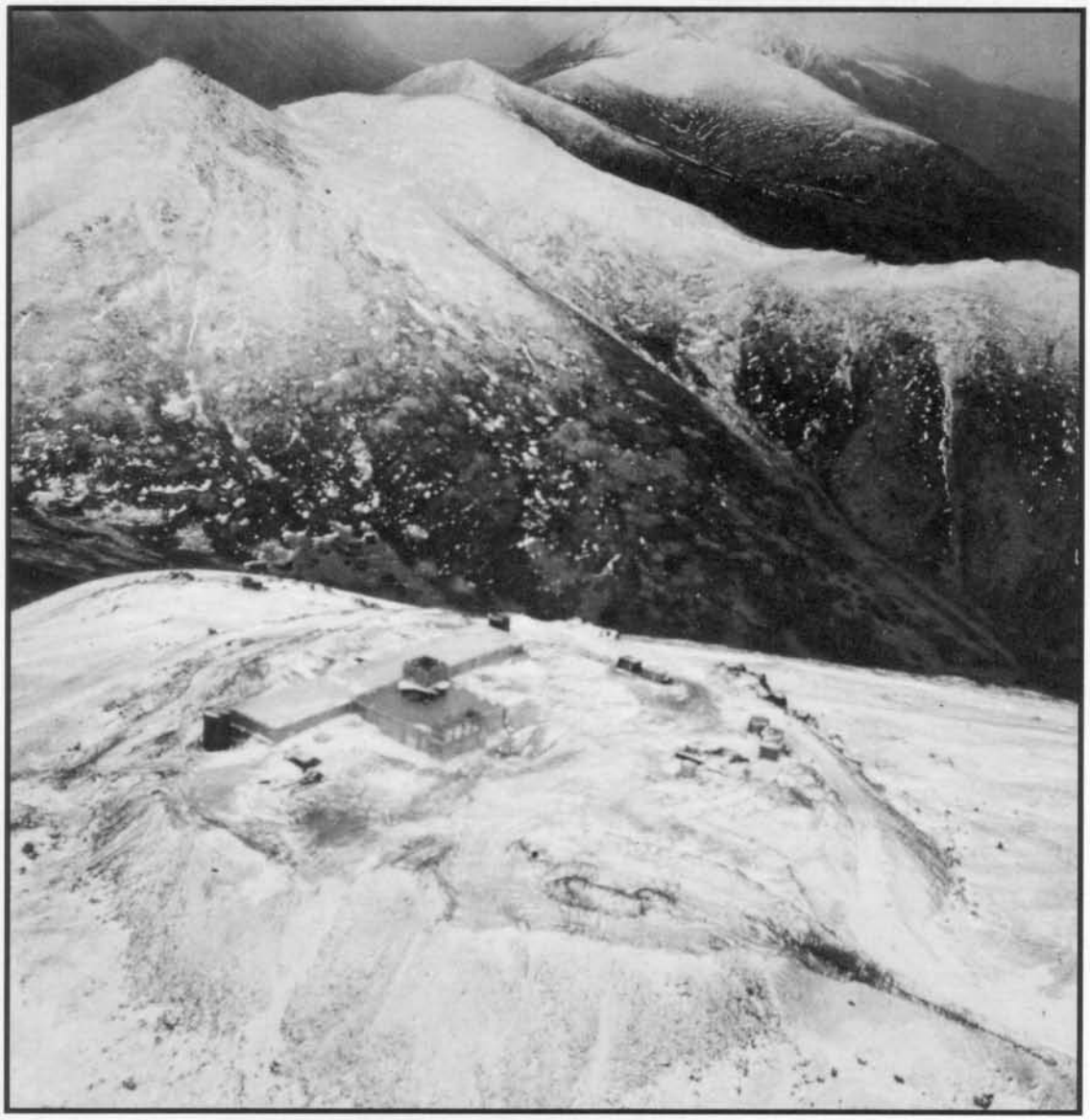
U.S. Army contractors developed the Nike Hercules system to combat a close formation of long-range heavy bombers. During the early 1950s, military planners believed that the Soviets would use strategic bombers, like the Tupolev Tu-95 (Bear) pictured here, to gain a foothold in Alaska to attack other American cities. (U.S.A.F.)

Nike Hercules in Alaska

In 1955, the military decided to place the Nike Hercules missile system in Alaska. It selected sites near Anchorage and Fairbanks to defend its major installations and local populations.

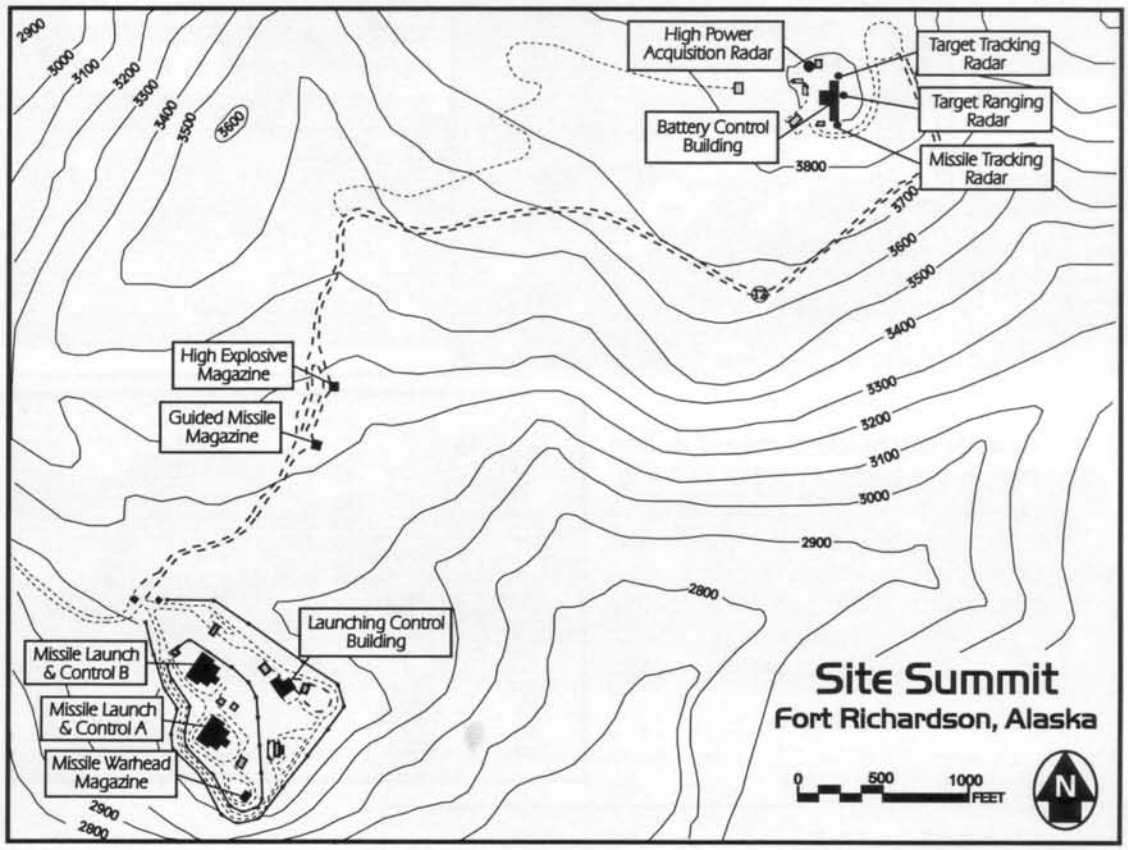


A Challenge to Build



Site Summit, known as B Battery, was one of three Nike Hercules missile installations in the Anchorage area to protect the military bases at Fort Richardson and Elmendorf. It was active from 1959 to 1979. Placed in the Chugach Mountains, Site Summit was a challenge to build because of the terrain and the harsh climate. Workers blasted rocky ridges to cut roads and to provide a level site for the battery control area. (National Archives)

The site had battery control and launch areas. To operate effectively, the battery control area with radars and personnel housing stood at a higher elevation and within clear sight of the launch area. The launch area had two concrete missile launch and storage structures, the warhead magazine, and the control building. Security measures included double chain link fencing with barbed wire, an alarm system, and guard dogs. A 1.5 mile road, along which were high explosive and guided missile magazines, connected the two areas.



Structures Tell the Story

Most of Site Summit's historic structures and buildings remain. They provide us with a better understanding of the Nike system military defense strategy of the time.

A feature unique to the Alaska Nike sites were clamshell tracking radar covers. The covers protected the radar from inclement weather and permitted year-round maintenance to take place. When the radar was operating, the covers were retracted. These structures are deteriorating as wind is ripping off the metal siding. 1994.

At least fifty soldiers stayed at Site Summit. In the battery control building, they operated the acquisition and tracking radars. The building also had accommodations, dining hall, recreation area, barber and PX. Battery control building, circa 1960. (Anchorage Daily News)

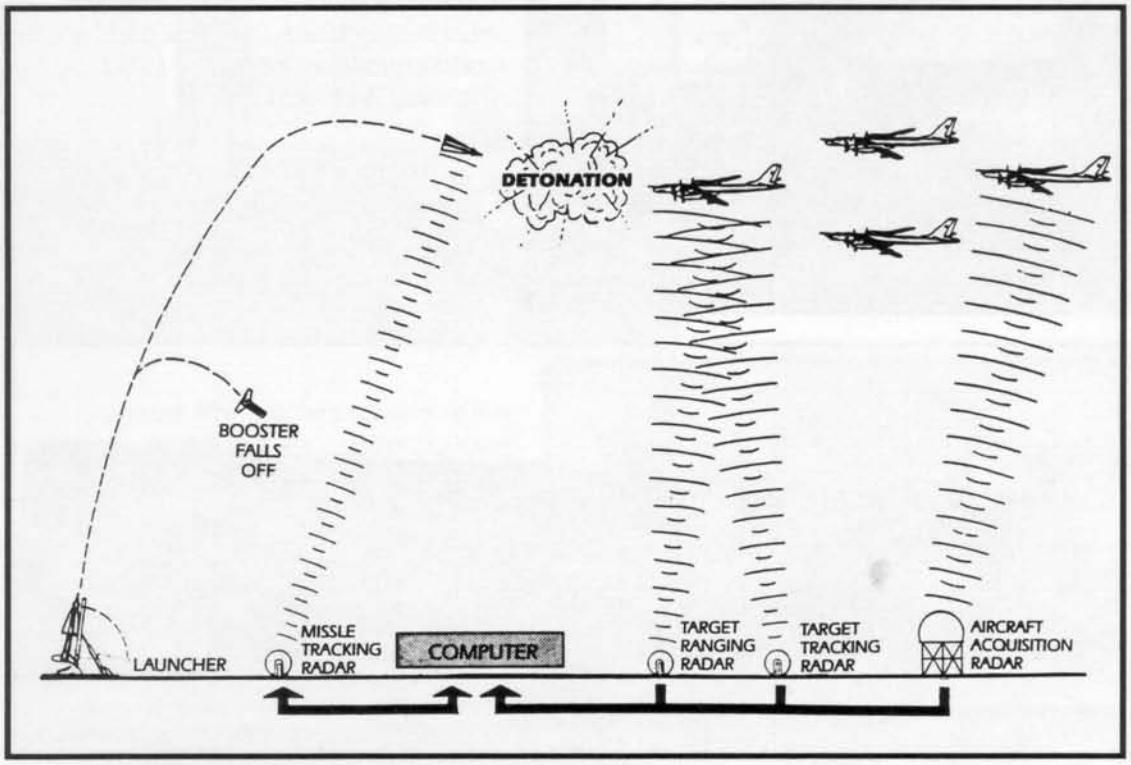
The weather and lack of maintenance have taken a toll on the battery control building. 1995.

At Site Summit, two concrete launch structures held assembled Nike Hercules missiles. In preparation for firing, an overhead crane attached boosters to the missiles. Rails moved the missiles to the blast pad. Although the missiles and rails are gone, the launch structures and blast pads are in good condition. February 1968. (National Archives)

Missile launch and storage structure, 1994.

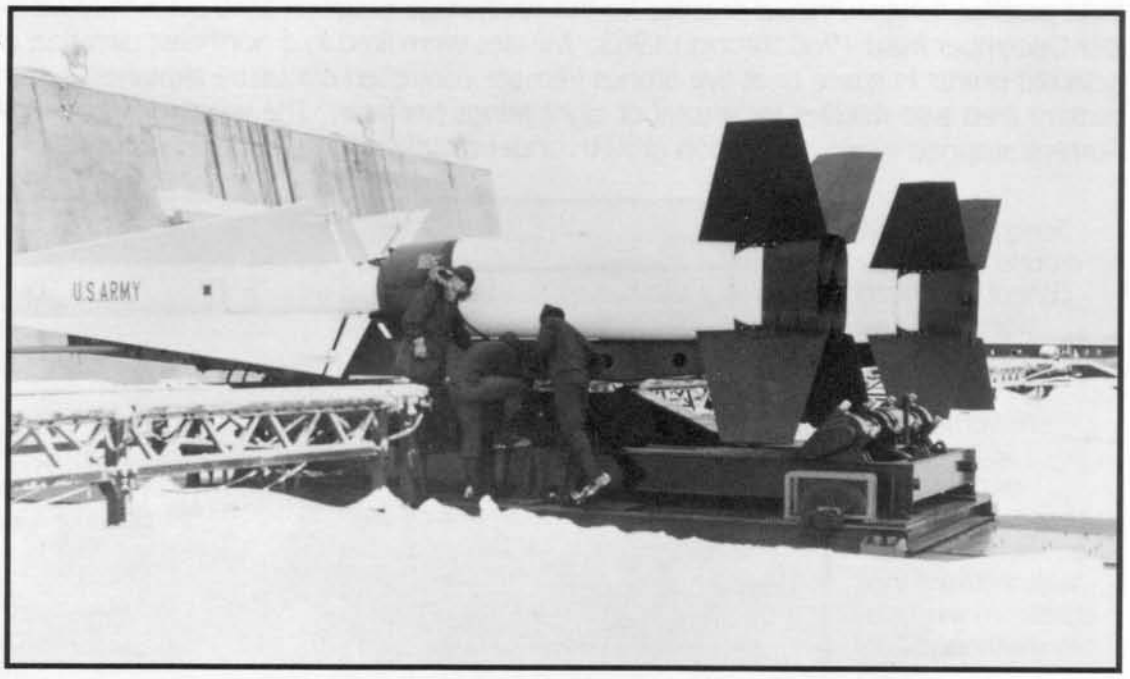
Nike System Operation

The Nike Hercules system had tracking radars and a computer that guided the supersonic, surface-to-air missiles to their targets. Acquisition radars swept the sky looking for enemy aircraft. Once an enemy plane was identified, radar locked onto the target and fed information about the plane's movement and altitude to the computer. This information was relayed from the missile tracking radar to the Nike missile at the launch site. The Battery Control Commander determined when to launch the missile. Radars worked in unison to relay information about the target to the missile in flight. The computer calculated the impact point and kept the missile on target. When it neared the target, the missile warhead exploded on command from the computer.



Nike Hercules Missile Specifications

Type	Surface-to-air, guided missile
Guidance	Command
Length	41 feet 6 inches
Diameter	2 feet 7 inches
Wing Span	6 feet 2 inches
Weight	10,400 pounds
Propulsion	Two-stage, solid-propellant rocket motor
Speed	Supersonic (Mach 3.65)
Range	87 miles
Ceiling	150,000 feet (45 km)
Warhead	High Explosive or Nuclear



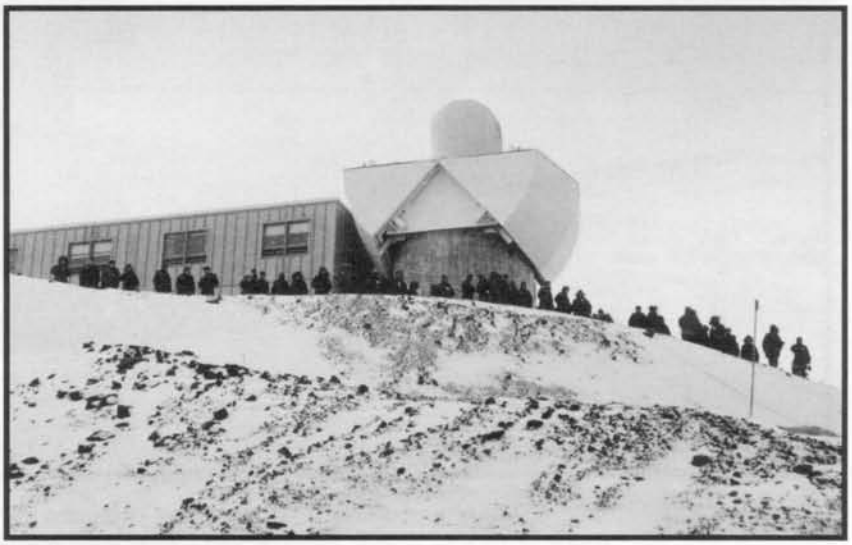
Soldiers preparing Nike Hercules missiles for firing at Site Summit, circa 1960. (National Archives)

The U. S. Army was responsible for ground and anti-aircraft defense in Alaska. The 4th Missile Battalion, 43rd Artillery (redesignated the 1st Battalion, 43rd Air Defense Artillery in 1971) with direct support maintenance provided by the 524th Ordnance Company staffed the Anchorage Nike batteries. The battalion had missile firing units at Site Summit, Site Bay, and two at Site Point.

Typically, operation of a Nike battery involved 125 people who staffed a site 24 hours a day, 7 days a week. The soldiers received constant training in maintenance, repair, and operation of the system.

Firings from Site Summit

Site Summit and Site Peter were the only Nike missile installations in the United States that held practice firings. Annual practice for the Anchorage battalion took place in November-December from 1960 through 1963. Missiles were fired in a northeast direction at selected points in space or at live drones (remote controlled miniature airplanes). Each battery fired two missiles for a total of eight firings per year. The live firings from Site Summit stopped when population growth under the flight path made firings unsafe.



Spectators stood around the Battery Control Building to watch the first missile launch at Site Summit on November 20, 1960. People gathered in Anchorage streets and school children watched from their classroom windows. (Anchorage Daily News)

Army personnel with Captain Erwin F. Tholl, Jr. (center), Site Summit Battery Commander, at the controls for the first missile firing. (National Archives)

*The missile **Celebrity** launched during the first live firing at Site Summit. After the firing, General J.H. "Iron Mike" Michaelis, Commander of the U.S. Army Alaska, told on-site spectators that the "live-fire exercises were invaluable training in firing from actual combat sites and at the same time demonstrating to the citizens of Alaska and the nation the power of this modern weapon." (National Archives)*

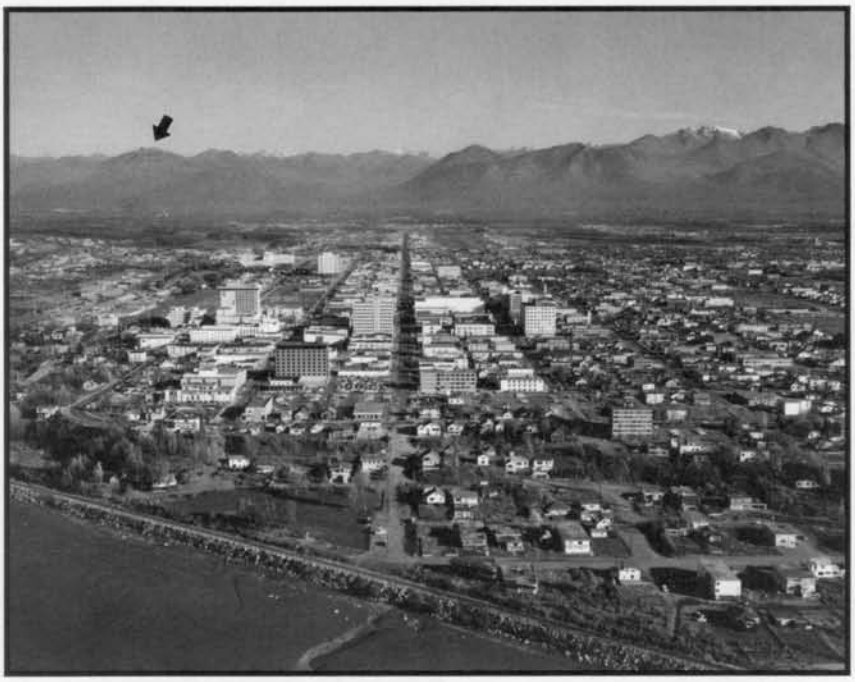
Anchorage Residents Remember

"The Nike site gave a sense of protection for the populace as a line of defense to keep the Soviets from using Anchorage as a staging area from which to attack the lower 48."

- Robert Atwood, then editor of The Anchorage Times

"We felt much safer knowing the Nike sites were there and believed they would improve the population's chances for survival if the Soviets attacked."

- Catherine Davis, an Anchorage school teacher

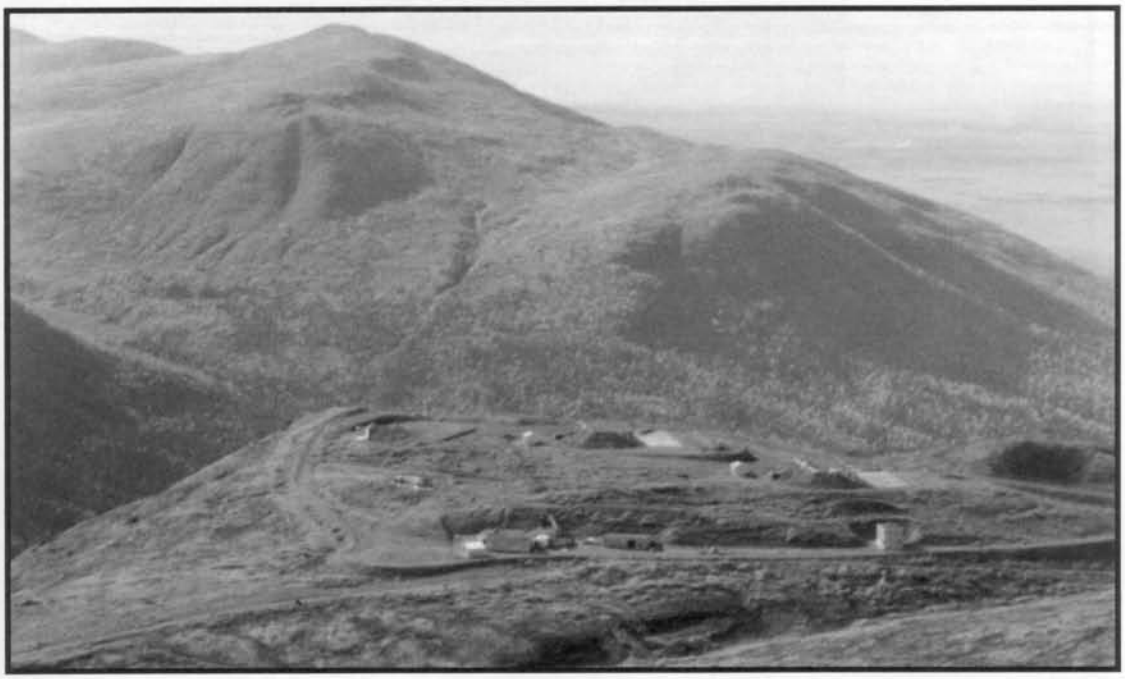


Anchorage, 1967. Site Summit's radar towers (upper left) were visible from downtown Anchorage. Residents associated the soldiers at Site Summit with the holiday star located on the hillside. The soldiers lit the star each winter as a symbol of goodwill for the people of Anchorage. This tradition continues today. (Anchorage Museum of History and Art)

Closing Doors

The changing political climate and rapidly developing defense technologies made the Nike bases obsolete. The Army deactivated the Fairbanks Nike sites in 1971. The last U.S. Nike installations to close were in Alaska and Florida. Site Summit was deactivated in 1979. The Army removed the radars, computer, missiles and other sensitive military equipment, but left the buildings and structures.

In the alpine setting, suitable wildlife habitat exists for golden eagles, falcons, coyotes, wolves, Dall sheep, and black and brown bears. To the east and south, there are spectacular views of mountain peaks and glaciers, to the west the City of Anchorage and Cook Inlet, and to the north the Alaska Range, with Mount McKinley and the Talkeetna Mountains. The site is adjacent to downhill and cross-country skiing areas and Chugach State Park hiking trails.



Site Summit's buildings and structures offer excellent opportunities to interpret the Cold War in Alaska. Pictured is the launch area in 1994.

Part of Our Valuable Heritage

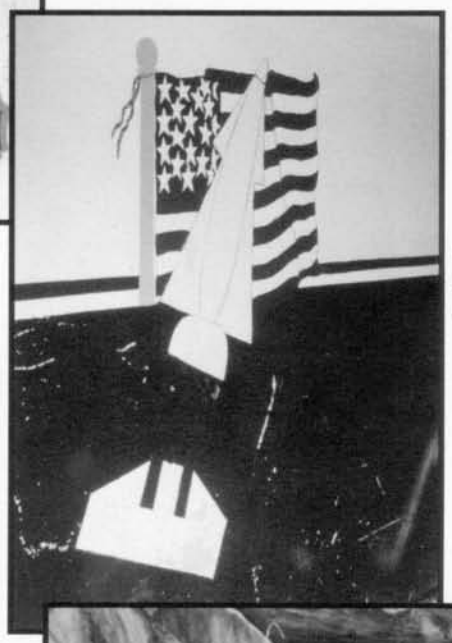
Site Summit is the only Alaska Nike site with historic integrity. Documentation has been prepared for listing in the National Register of Historic Places. With additional Legacy Resource Management Program funding, a feasibility study will be conducted to develop a plan considering historic preservation, interpretation, and public recreation uses for the site and buildings.

Some of the abandoned buildings and structures, however, are threatened and are starting to deteriorate. With the changing military mission, downsizing, and deterioration of many other Cold War properties, Site Summit is one of the few opportunities left in Alaska to interpret America's critical defense system. It should be recognized as a valuable part of our heritage before it is too late. **Now** is the time to preserve this significant Cold War site.

Battery Control area, 1993.

Some of the soldiers' artwork remains on walls inside Site Summit structures.

"Sustinemus" ("We Support")
the motto of the 43rd Air Defense Artillery



A Nike Hercules
missile with
U.S. flag

A mural depicting Site Summit
in action signed by
F.L. Clark and Scott D.

During the Cold War, the U. S. Army was responsible for ground and anti-aircraft defense in Alaska. This U. S. Army Alaska symbol is painted on the wall of the dining room at Site Summit.

Site Summit is U. S. Army property. Access is restricted.