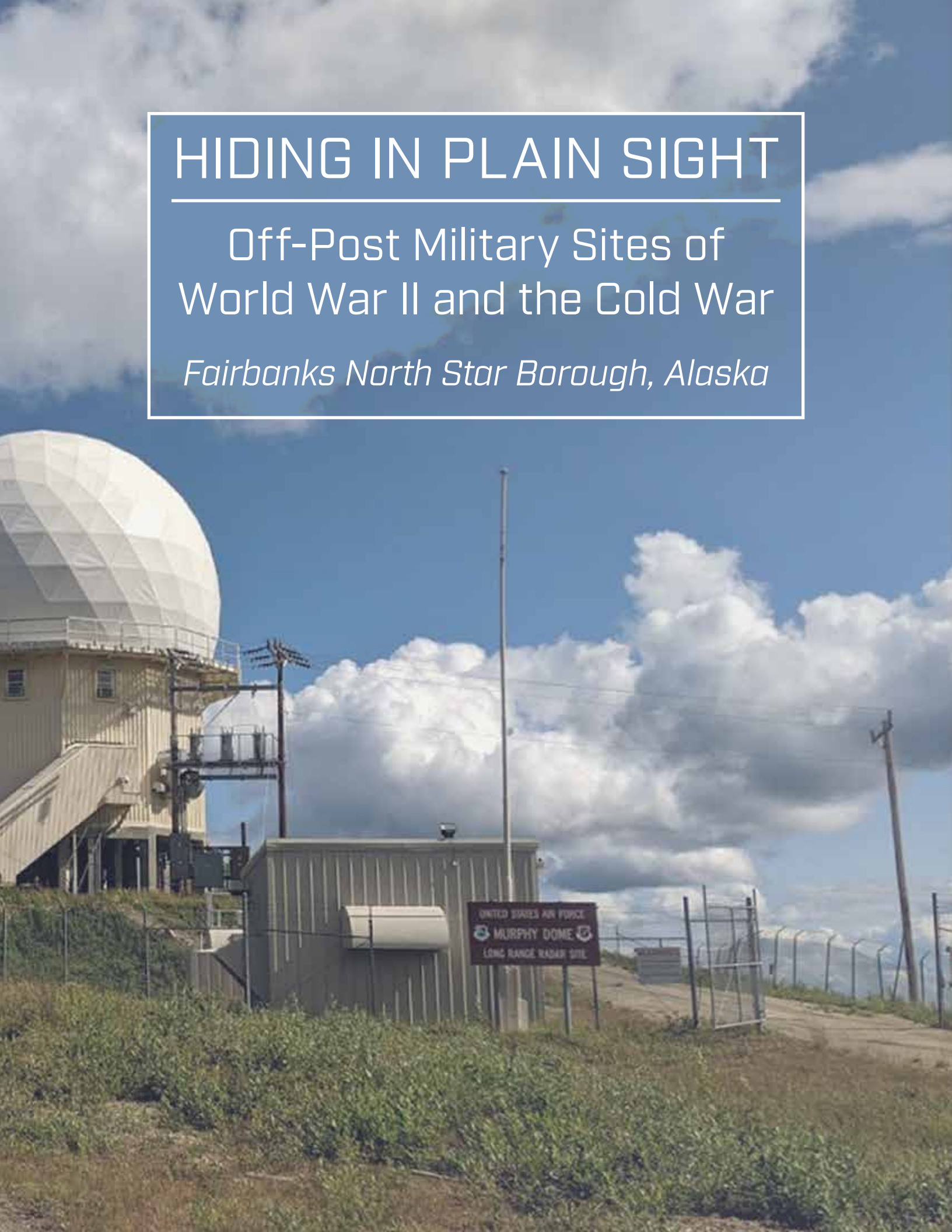
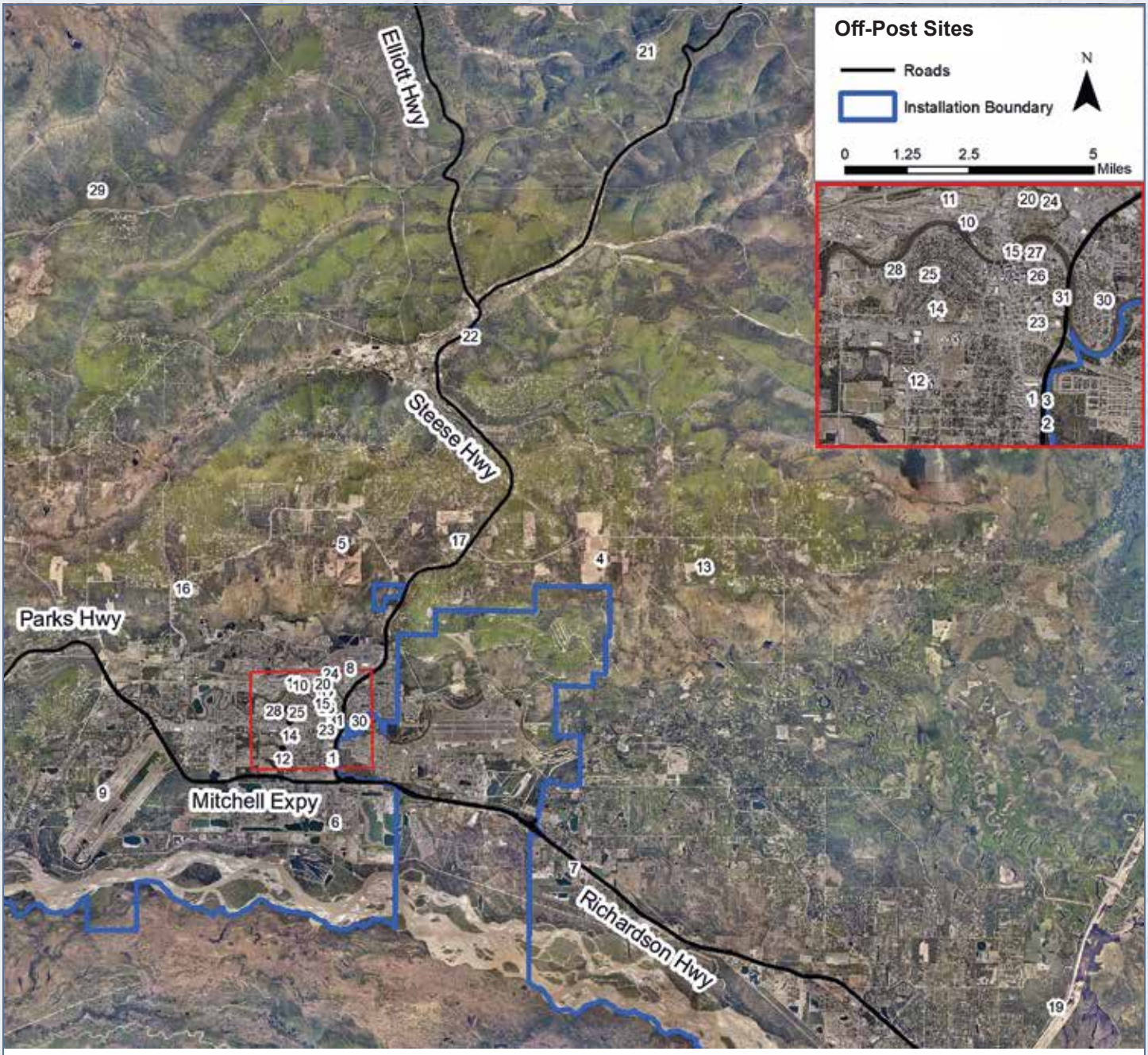
# HIDING IN PLAIN SIGHT

## Off-Post Military Sites of World War II and the Cold War

*Fairbanks North Star Borough, Alaska*






1. 211 Ladd Ave. (FAI-02553)
2. 215 Ladd Ave. (FAI-02664)
3. 219 Ladd Ave. (FAI-02664)
4. AAA Site No. 1 (FAI-02795)
5. AAA Site No. 2 (FAI-02796)
6. AAA Site No. 3 (FAI-02797)
7. AAA Site No. 4 (FAI-02798)
8. AAA Site No. 8
9. AAA Control Center
10. AKRR Quonset 1 (FAI-02799)
11. AKRR Quonset 2 (FAI-02800)
12. Tanacross WWII Hangar/Big Dipper (FAI-02806)
13. Eberhardt Quonset (FAI-02801)
14. Fairview Manor
15. Original USO Building
16. KFAR Transmitter (FAI-02802)
17. Ladd NCO Club (FAI-02803)
18. Murphy Dome (FAI-00341)
19. Nike Site Tare (FAI-01670)
20. Noyes House (FAI-00350)
21. Pedro Dome (LIV-00177)
22. Permafrost Tunnel (FAI-02148)
23. Second USO Building (FAI-01928)
24. Tamarac Inn (FAI-02805)
25. Queen's Court (FAI-02804)
26. Northward Building (FAI-01856)
27. Polaris Building (FAI-01723)
28. Fairbanks Armory (FAI-02301)
29. Nike Site Love (FAI-00403)
30. Island Homes (FAI-02680)
31. Dixon Apartments (FAI-02561)

*Off-post sites described in this document. (created by Barrett Flynn)*

*Photos courtesy of the Cultural Resources Office, Fort Wainwright unless otherwise noted.*

# INTRODUCTION

## Purpose and Scope of Study

Alaska served as a key strategic location for national security in both World War II and the Cold War. Throughout the Fairbanks North Star Borough, there are a number of sites with an association to World War II or the Cold War. Some of these sites have not been thoroughly documented or researched. Many of these sites have been demolished or severely altered, while others were repurposed or abandoned and left to deteriorate. Most of these buildings or structures remain in their original locations, while some have been moved to new sites. The purpose of this study was to identify, document, and research sites with a significant connection to the military or base communities during the two wars, in order to create a more comprehensive picture of the military's presence, involvement, and influence in the region.

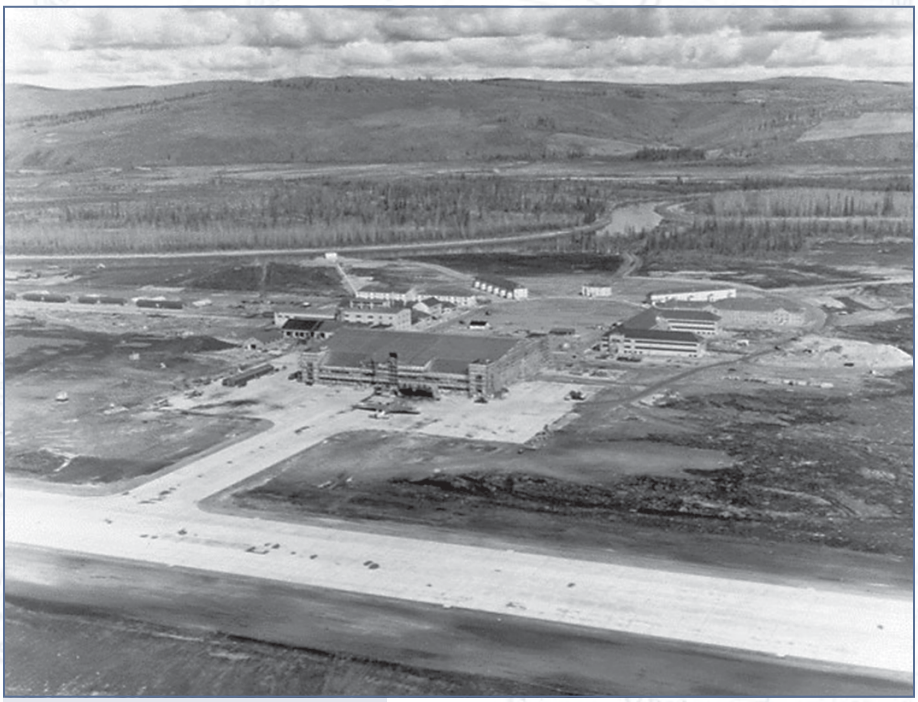
The Fairbanks North Star Borough consists of 7,361 square miles and encompasses two cities – Fairbanks and North Pole, two military bases – Fort Wainwright and Eielson Air Force Base, and several unincorporated communities within its boundaries. The sites identified and investigated in this study include only those that are located off Army-managed lands but within the confines of the borough. Sites identified in this study and still standing are located on both public and private property.

## Methodology

At the start of this project, local historians and other knowledgeable members of the community were contacted in order to create a list of off-installation sites within the Fairbanks North Star Borough. With an initial list of potential sites identified, documentation and research of the sites began. Sources included oral histories, published histories, cultural resource reports, property records, newspapers and available military records. The University of Alaska Fairbanks' Alaska and Polar Regions Collections and Archives provided much useful information and photos. Online archival and historical sources also provided information used in this project. Although information was abundant for some of the sites, details about other sites were hard to find or were not found at all. Other sites were identified by those consulted on the project, but their connection to the military or either war could not be verified. Sites in these two categories have been omitted. Further research may uncover more information on these sites in the future.

While some sites were readily accessible to investigate and document, others were located in remote areas or on private property. Property owners were contacted and asked permission to access a site to take notes and photographs. While some owners were happy to provide access and information to a specific site, others were not responsive to contact attempts. Because of this, not all still-standing sites included in this report have current photos or details of their condition. These sites were included in the report to provide a more accurate inventory in hopes that they can be accessed and documented at a later date. It is also believed that there are more sites in the Fairbanks North Star Borough that have an association to World War II or the Cold War that were not identified for this project. There may be more to uncover, research, and document at a later time and this study may serve as a foundation.

**The sites identified and investigated in this study include only those that are located off Army-managed lands but within the confines of the borough.**



*Aerial photo of Ladd Field, 1941.*

# HISTORIC CONTEXT

## World War II in Fairbanks

Following the 1939 start of World War II in Europe, the Protective Mobilization Plan was approved in 1940 to strengthen and prepare the American military in reaction to the growing global instability. The plan included the expansion of military facilities across the United States, as well as the construction of new installations. This expansion included Alaska, where a series of airfields were strategically built in the event of war.[1]

Before World War II, the military presence in Alaska was a small fraction of what it would later become. A single installation located in Haines was the only active Army occupancy in the whole territory. In an attempt to evaluate the current defenses present and to identify needs, a group of ten B-10 Bombers led by Lieutenant Colonel Henry "Hap" Arnold flew to Alaska from Washington, D.C. in 1934. An aim of the Army Air Corps survey was to identify potential sites for airfields. Included in Arnold's report was the establishment of an air base in the region to be used as a tactical supply point and for implementing a cold weather testing program. Fairbanks appeared to be ideal for the air base due to its proximity to a rail line and an airfield for transporting construction supplies. The climate of Fairbanks was also an ideal sub-arctic location for the cold weather research the Corps wished to conduct. After a team canvassed the area for a site, it was announced that roughly six square miles east of the city would be set aside for the project. Construction started in 1939, just days before World War II began in Europe. Ladd Field served as a cold weather testing station for two years before the Japanese attack on Pearl Harbor drew the U.S. into the war.[2]

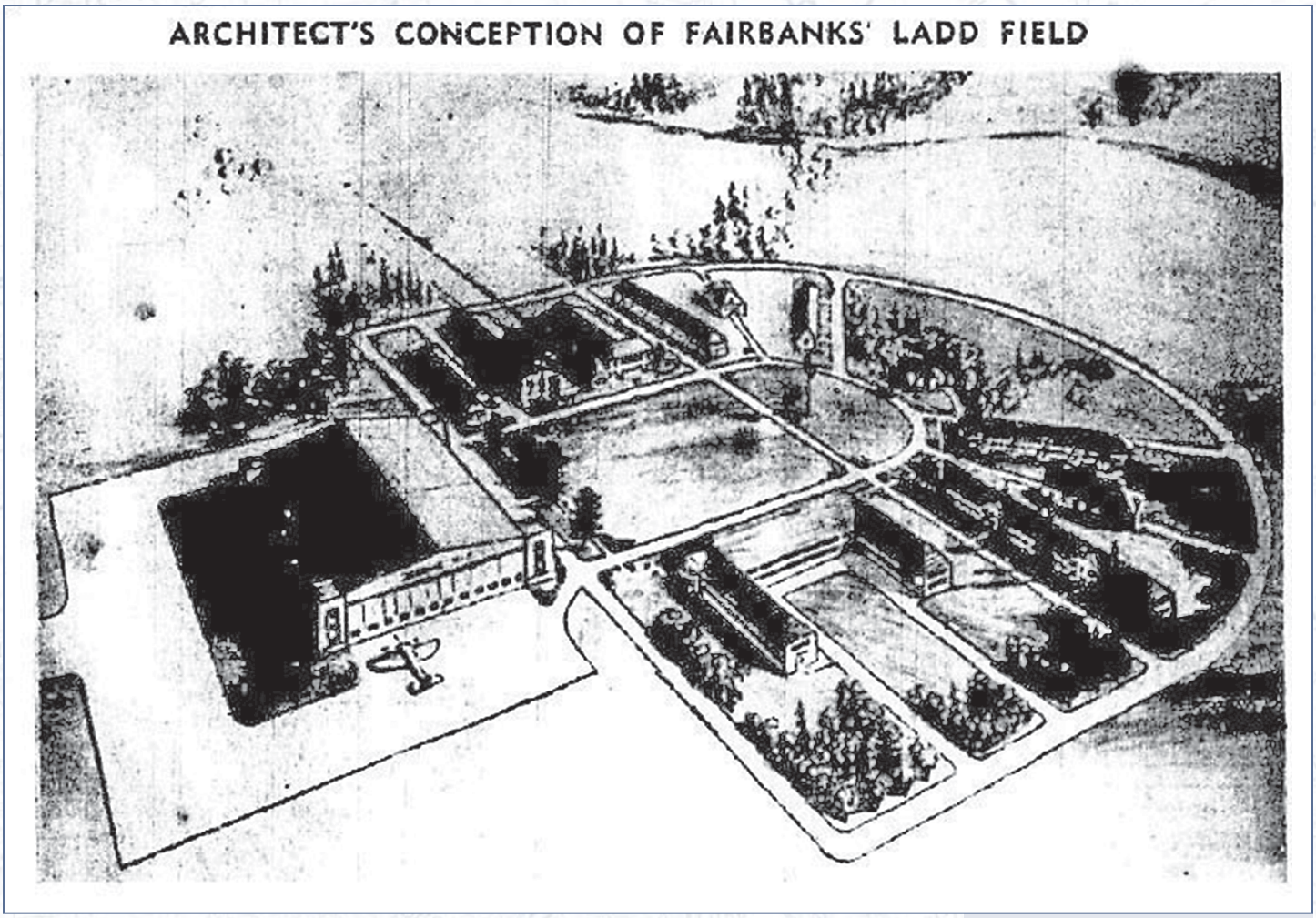
The first person in Alaska to learn of the attack on Pearl Harbor was KFAR "Key for Alaska's Riches," radio engineer, Augie Hiebert, on the morning of December 7, 1941. Hiebert then notified Colonel Dale Gaffney, the commander of Ladd Field. Upon receiving the news, preparations began immediately for a possible attack on Fairbanks. Soldiers were sent to stand guard at the Fairbanks telegraph office, federal building, power plant, and radio station. Because Gaffney said he had "three jobs for every man" at the base, volunteers soon took over the role of guarding specific buildings. On December 8, the U.S. officially declared war on Japan, and over 200 men in Fairbanks came forward to sign up for civil defense work. Barricades were installed in key areas around town, including Creamer's Dairy, the University of Alaska, the airport runway, and any straight stretches of the Richardson Highway within eight miles of the Fairbanks vicinity.[3]

Beginning on December 10, a city blackout for Fairbanks was ordered. Previously used for a city fire alarm, a steam siren became a blackout siren and was used to signal possible air

1 Tetra Tech Inc., *Final Inventory and Evaluation of Military Structures at Fort Greely, Delta Junction, Alaska* (Alaska: Army Corps of Engineers, April 1999), 2-1.

2 Kathy Price, *The World War II Heritage of Ladd Field, Fairbanks, AK*, ed. Glenda R. Lesondak (Fort Collins, CO: Colorado State University, 2004), 5-7.

3 Dermot Cole, *Fairbanks: A Gold Rush Town that Beat the Odds*, ed. J. Stephen Lay (Kenmore, WA: Epicenter Press, 1999), 121-124.




*Architect's concept drawing of Ladd Field, 1940.*

raids. Wood, black paper, and dark blankets served as window coverings and fires were not to be stirred in houses to prevent sparks that might be seen in the dark. The headlights of vehicles were also covered, making them a dim blue. All of these precautions could not completely darken the area at night, however, because the snow on the ground inevitably reflected some light. The city council even proposed adopting blackout rules, which if broken could result in a $100 fine, 30 days in jail, or both. As the threat continued, evacuation plans were devised such as fleeing to the hills north of the city. Around this time, military family members were ordered back to the lower 48 states for their safety.[4]

World War II brought impactful changes to Fairbanks and Alaska, both economically and socially. Military expenditures in Alaska were close to $3 billion during the war. Expanded federal spending in the region created new jobs and attracted new residents. During the war, tens of thousands of civilians moved up for military employment, while military personnel numbered at about 300,000.[5] Enrollment at the university greatly decreased during the war, dropping from 310 in 1940 to less than 70 students by 1943. Not only was there a loss of students, but also the faculty numbers decreased during the war. Additionally, due to a shortage of facilities at Ladd Field, a large portion of the campus was released

[4] Cole, *Fairbanks: A Gold Rush Town*, 124-125.

[5] Julie Decker and Chris Chiei, *Quonset Hut: Metal Living for a Modern Age* (New York: Princeton Architectural Press, 2005), 31.

*Hangar 1 under construction at Ladd Field, 1941.*

to the military for use.[6] Once a major employer, the gold mining industry also came to a halt. The miners mainly shifted their work to the construction of Ladd Field.[7] Disruption in the mining industry occurred in much of Alaska, with miners and their families relocating to communities with a military base like Fairbanks where there was work. Ladd served as the main source of employment in Fairbanks at the time, with buses transporting workers from various parts of town.[8] Employment at Ladd Field provided an income two to three times greater than residents had been receiving in their previous jobs.[9]

Alaskan towns, including Fairbanks, were unprepared for the extreme increase in population that military activity brought. Services were spread thin and there was not enough housing to accommodate all newcomers. Necessities such as power, sewer, and water were overwhelmed. Although the city was ill-equipped to handle the sudden influx of residents, business owners and the permanent residents of Fairbanks saw economic benefits as income flowed through the city as never before.[10]

American soldiers were not the only new faces seen in town. Beginning in 1942, Soviet soldiers were observed walking the streets of Fairbanks as a result of the Lend-Lease program. Established initially as a program to provide aid to Great Britain in the form of war supplies, it eventually encompassed other nations, depending on their need and strategy. In 1941, thousands of Soviet warplanes were destroyed by Germany in a surprise attack, prompting the U.S. to extend Lend-Lease assistance to the United Socialist Soviet Republic (U.S.S.R.) The Second Protocol of the agreement created a northwest route through Alaska for ferrying planes. This northwest route going through Alaska and Siberia was ideal as it was the most direct passage and provided areas to stop for repairs and refueling along the way. The route began in Great Falls, Montana, and once in Siberia, aircraft went westward toward the frontlines. Ladd Field in Fairbanks served as the hand-off site where U.S. planes were transferred over to Soviet military personnel.[11] Over the three-year period in which the Soviets were supplied aid through the Lend-Lease program, almost 8,000 planes were handed over in Fairbanks on their way to the front.

Although nothing was printed or broadcasted locally about the Soviet presence, it was no secret to the residents of Fairbanks. Planes marked with red stars were consistently seen flying above Fairbanks and Soviet officers were seen regularly around town shopping. The pilots bought a variety of goods in bulk to take with them back to the U.S.S.R.[12] Unlike in the lower 48 states, Alaska was not limited by rationing of goods. Because of this, there were no restrictions on buying, so

[6] Cole, *Fairbanks: The Gold Rush Town*, 135-36.

[7] Lola Colette, interview by Margaret van Cleave, February 3, 1994, call number 94-13-10 pt. 1 side A, transcript, Series: Pioneer Tapes – Igloo #4, Fairbanks, AK.

[8] June McDonald, interview by Margaret van Cleave, February 15, 1994, call number 94-13-11, transcript, Series: Pioneer Tapes, Fairbanks, AK.

[9] Richard Cooley, *Fairbanks, AK: A Survey of Progress* (Juneau, AK: Alaska Development Board, 1954), 10.

[10] Decker and Chiei, *Quonset Hut*, 36, 41.

[11] Price, *The World War II Heritage of Ladd Field*, 36.

[12] Cole, *Fairbanks: A Gold Rush Town*, 140.

the Soviet airmen took full advantage, and Soviet personnel were often seen frequenting a department store in Fairbanks called Gordon's Store.[13] Items such as stockings, lingerie, and perfumes were often sold out at Gordon's because the pilots bought everything available to take back to their wives and girlfriends. Using American money, they had no purchasing limitations and could buy in whatever quantity they pleased.[14]

Although they were often seen around town shopping, the Soviet personnel stationed at Ladd mostly kept to themselves. It was against orders to socialize informally with Americans, which included dating American women. There was often an underlying distrust of the Soviets by the community of Fairbanks, but it was understood that the Lend-Lease program was a necessary alliance to defeat Germany.[15] The controversy lasted beyond the length of the program, however, with some suspecting the pilots of espionage. Because the planes and cargo they contained had diplomatic immunity, there was no searching of aircraft being passed over to the U.S.S.R. Ultimately, the cooperation between the allies with the Lend-Lease program is considered a success and pivotal to winning the war.[16]

## Cold War in Fairbanks

At the end of World War II, the U.S. and U.S.S.R. emerged as the two dominant militaries in the world. This mutual suspicion fueled the idea that each nation's existence was a threat to the other. Although the Cold War's 45-year span did not result in direct military confrontation between the two countries, both countries were prepared for escalation.[17] This ongoing tension resulted in copious defense-related projects and substantial military spending. As each sought to surpass the other country, significant advances


*Second Avenue, downtown Fairbanks facing west, 1944.* *(Alaska Digital Archives)*

*Colonel Dale Gaffney and Colonel N. S. Vasin shaking hands, 1944.* *(Alaska Digital Archives)*

[13] Price, *The World War II Heritage of Ladd Field*, 45.

[14] Colette, interview by Margaret van Cleave, February 3, 1994.

[15] Cole, Fairbanks: *A Gold Rush Town*, 136, 140.

[16] Sheryl Nix, "Ladd Airfield History Sparks Mystery, Intrigue," U.S. Army website, July 15, 2010, accessed January 29, 2020, https://www.army.mil/article/42312/ladd_airfield_history_sparks_mystery_intrigue.

[17] Kathy Price, *Northern Defenders: Cold War Context of Ladd Air Force Base, Fairbanks, Alaska, 1947-1961* (Fort Collins, CO: Colorado State University), 5.

in technology and science developed in both the U.S.S.R. and the U.S.[18]

Alaska became a crucial area of defense for the U.S. military during the Cold War due to its proximity to the Soviet Union. The Soviets developed technology that allowed four-engine, long-range bombers to reach the northwestern U.S. The reach of the bombers could be further extended to other targets in the nation by capturing bases located in Alaska.[19]

The Soviet threat prompted the government to invest hundreds of millions of dollars in defense systems for Alaska. Military-related construction projects totaled $1.2 billion between 1947 and 1957, and the military became the state's primary employer.[20] During this same period, military personnel in Alaska grew from 25,000 to 48,000 and the civilian population rose from 83,000 to 180,000.[21]

In the region around Fairbanks, the federal government invested more than $250 million between 1950 and 1955, related personnel being compensated with an annual payroll of $40 million.[22] New military missions and the creation of the Air Force required the expansion of Ladd Field and build-up of the new Eielson Air Force Base 10 miles to the east. The continued construction, division of missions between the military components, and development of tactical assets was followed by the Air Force moving operations to Eielson and the Army re-assuming control of Ladd Field in 1961, rededicating the installation Fort Johnathan Wainwright.

During the early Cold War years, blackout drills were commonplace once again to prepare citizens against air raids. During one practice blackout, KFAR radio announcers broadcasted live as they looked for visible lights across the city from the top of the Polaris building, one of Fairbanks' tallest buildings.

Between the years of 1940 and 1950, Fairbanks and the surrounding area saw an increase in population of 240%, and between 1950 and 1953, the population doubled again.[23] The scarcity of housing created complications all over the city for both civilians and military alike during this population boom. During this time, "an Army captain reported living for a winter in an 'old GI vehicle crate,' while another captain paid $80 per month, one year in advance, for three rooms and a bath. He had to help build the house…" An article about the dire conditions in Fairbanks was even published in the *New York Times*, where the reporter described some of the area's servicemen as living in a "hobo city" and "what are probably the worst conditions under the American flag."[24]

In the span of two years, 36 subdivisions were constructed around Fairbanks. The housing shortage led to the fast-paced construction of large apartment buildings and complexes. Around this period, people began moving to the hills outside of Fairbanks as alternatives to living in town.[25]

The population increase necessitated the expansion and improvement of other basic services. Projects that would normally take 30 to 40 years in most cities were completed in only ten years due to demand.[26] The urgency of waste management was significant, as only a third of the households in town relied on sewer systems and the remainder of residents used either septic tanks or cesspools. In 1953, the Alaska Water Pollution Control Board determined that the Chena River was unfit for fish reproduction, recreational use, and drinking water. The town expansions also required bridge construction and road improvements.[27] Transportation also improved with the $5 million construction of the Fairbanks International Airport in 1951. The antiquated telephone system in the area needed to be updated as it was severely

[18] United States *Army Corps of Engineers, The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, Alaska District, 2

[19] John Haile Cloe, "The Cold War Years: 1946-1991," Alaska Historical Society website, https://alaskahistoricalsociety.org/discover-alaska/glimpses-of-the-past/the-cold-war-years-1946-1991/. (Accessed February 19, 2020).

[20] Dermot Cole, Fairbanks: A Gold Rush Town that Beat the Odds (Kenmore, WA: Epicenter Press, 1999), 158.

[21] Cloe, "The Cold War Years."

[22] Cole, *Fairbanks: A Gold Rush Town*, 158, 163.

[23] Cole, *Fairbanks: A Gold Rush Town*, 158-159.

[24] Cole, *Historic Fairbanks*, 36.

[25] Cole, *Historic Fairbanks*, 38.

[26] Cole, *Fairbanks: A Gold Rush Town*, 159.

[27] Cole, *Historic Fairbanks*, 35.

behind most cities. Before upgrades, the waitlist for those who wanted telephone service was approximately 800 people. As Fairbanks expanded, so did the need for electricity in outlying areas. Golden Valley Electric Association began providing electricity to people living outside of town, reaching a total of 2,000 customers by 1954.[28] As with other facilities, there was a shortage of space in schools for the influx of families and children. With the first boom, the number of children attending school doubled twice between 1942 and 1952. The facilities in place were overcrowded and resulted in the construction of schools such as Nordale Elementary and Denali Elementary.[29]

While much of the city was expanding, a controversial part of downtown was repeatedly threatened with demolition. 'The Line,' located downtown on Fourth Avenue between Barnett and Cushman streets, was the city's red light district, existing from its founding approximately 50 years prior. 'The Line' began with the intention of keeping prostitution contained and regulated. In 1909, it was reported that "Fairbanks had 3,000 to 4,000 people, 6 churches, 25 saloons, and about 150 prostitutes."[30] To establish the boundaries, two tall, wood board fences blocked off each end of Fourth Avenue where it met with Barnett and Cushman streets.[31] The prostitutes were required to take blood tests every three months, stay out of the bars, and pay "fines" to the police every month in order to stay in business. The pushback on the red light district of Fairbanks gained ground when the military established its presence, although a few attempts to stop it occurred earlier. The fight to get rid of 'the Line' increased in 1948 when Ladd Commander General Dale Gaffney threatened to restrict military personnel from going into town if it was not shut down. The majority of visitors to 'the Line' were construction workers and service men. Most residents of Fairbanks did not take issue with the

*Soviet officers shopping in a store in Fairbanks, c. 1942.* *(Alaska Digital Archives)*

*Soviet and U.S. military officers in Nome, 1942.* *(Alaska Digital Archives)*

[28] Cole, *Fairbanks: A Gold Rush Town*, 159, 163.

[29] Cole, *Historic Fairbanks*, 34.

[30] Cole, *Fairbanks: A Gold Rush Town*, 147-148.

[31] Terrence Cole, *Ghosts of the Gold Rush*, (Fairbanks, AK: Tanana Yukon Historical Society, 1977), 15.


*Second Avenue, facing east, c.1950s.* *(Alaska Digital Archives)*

*Aerial view of the Island Homes development, c. 1950s.*

red light district, arguing that it should be permitted in a town with thousands of single men. Many thought it better to keep it under partial government control because such business would take place regardless. After many years of discussion, the area between Third and Seventh avenues, consisting of 130 old cabins, was razed in an "urban renewal" effort to clean up some of the vice in the city.[32]

Business also boomed in Fairbanks as a result of the beginning of the Cold War. Additional services and hundreds of retail businesses sprung up quickly, offering goods that were formerly unavailable in the area.[33] Fairbanks began to resemble other cities with rows of businesses lining both sides of Second Avenue including theaters, cafes, and specialty shops. Social clubs also emerged around the community as the number of residents increased, including the Elks, Moose, Eagles, Pioneers of Alaska, Pioneer Women, Oddfellows, and Masonic orders. New clubs included the Rotary Club, the Lions, and Kiwanis. Churches also expanded across the city, as did sporting groups such as the curling club. Development of the city to meet the needs of the growing population required thousands of workers for jobs in such industries as construction. Many of these workers were transient due to the seasonal nature of the work, and with them came an increase in crime.[34]

Military-driven construction and the overall growth of the economy began subsiding around the time Alaska achieved statehood in 1959. Housing was no longer in demand as it once was, with vacancies appearing for the first time since the pre-war years. Despite this decline, Fairbanks still relied on the military as a critical component to the local economy during the 1960s.[35] During this time facilities, transportation, and communication continued to improve, making Fairbanks

[32] Cole, Fairbanks: *A Gold Rush Town*, 150-153.

[33] Richard A. Cooley, *Fairbanks, AK: A Survey of Progress* (Juneau, AK: Alaska Development Board, 1954), 11.

[34] Claus M. Naske and Ludwig J. Rowinski, *Fairbanks: A Pictorial History*, 114-115.

[35] Cole, *Historic Fairbanks*, 40, 43.

*North façade of 211 Ladd Ave., 2019.*

resemble most towns located in the lower 48 states in terms of access and advancements.[36] The only setback that temporarily halted Fairbanks growth was the great flooding of the Chena River in 1967, which resulted in the evacuation of 15,000 residents and approximately $85 million dollars in property damage.[37] Going into the 1970s, Fairbanks experienced another population and economic boom tied to the discovery of the largest oil field in North America on the North Slope.[38] By the mid-1970s, the north post of Fort Wainwright became the Alyeska Pipeline headquarters. The population of Fairbanks North Star Borough increased 40% and the number of businesses in town doubled.[39]

## HOUSING

The need for housing in Fairbanks began during World War II. But with the Cold War, it developed into a crisis. A Daily News-Miner article pointed out that before World War II, housing in Alaska was largely taken on by families building their own homes. With the war came a housing shortage and skyrocketing prices as workers and military moved into the area. This population surge created an even greater need for housing, and the focus turned to constructing multi-family units.[40] The demand was high and construction projects began all over town. One resident commented to the Daily News-Miner that, "… the Fairview Manor will house some 1500 people. That's more than the whole town had before the war."[41]

*North façade of 215 Ladd Ave., 2019.*

*North façade of 219 Ladd Ave., 2019.*

Subdivisions and housing constructed in response to the population boom and housing shortage began in World War II and continued into the Cold War. Housing filled in spaces around the town that were previously unbuilt in every direction and closed the distance between town and installation boundary. Examples include: Arctic Park, Aurora, Birch Park, Brandt, College, Dixon Apartments, Fairview Manor, Graehl, Hamilton Acres, Hamilton Apartments, Island Homes, Lemeta, Mooreland Acres, Mooreland Court, Northward Building, Polaris Building, Queen's Court, Slaterville, South Fairbanks, Tamarac Inn, Weeks Field, and Westgate.

### Ladd Avenue Residences

The houses on Ladd Avenue were built in response to the need for military housing during World War II and the early Cold War years. They are prefabricated military-style with some alterations and, at time of publication, are vacant.[42] 211 Ladd Avenue is a

[36] Cole, *Fairbanks: A Gold Rush Town*, 181.

[37] Ibid, 188.

[38] Ibid, 200.

[39] Ibid, 203.

[40] "Home Building Expected to Be Major Need in Alaska for Many Years in the Future," *Fairbanks Daily News-Miner*, December 3, 1958.

[41] George Gale, "Rail-Belt News," *Fairbanks Daily News-Miner*, December 1, 1951.

[42] Alaska Office of History and Archaeology, *211 Ladd Avenue*, AHRS card number FAI-02553, April 18, 2018.


*Northward Building, 2019.*

*Fairbanks flood, 1967 with Northward Building in background to the left.* *(Alaska Digital Archives)*

*Northward Building, 1959.* *(Alaska Digital Archives)*

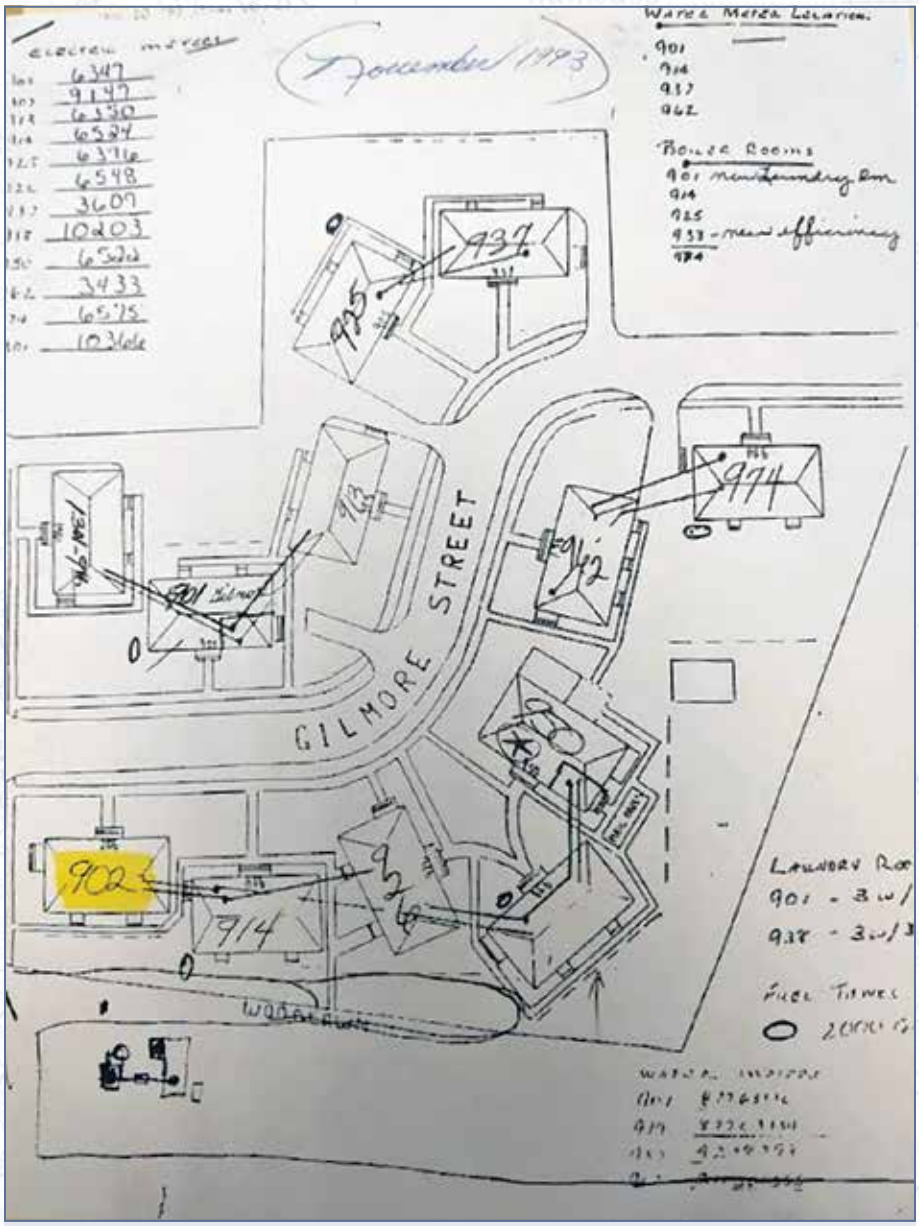
single-family residence built in 1940, while the other two buildings are multi-family dwellings built in 1948.[43]

## Northward Building

The Northward Building was constructed beginning in 1950, opening in the summer of 1952. The mixed-use building was the first of its kind in Fairbanks, with its modern look and metal siding contrasting against the older buildings of the area. The eight-story building featured an enclosed shopping area on the first floor and apartments on all remaining floors.[44] The building occupied a full block between Lacey and Noble streets and featured steel framing and reinforced concrete floors. It was only the third building in Fairbanks to have an elevator.[45] The building was designed to be both fireproof and earthquake proof, in addition to being considered extremely modern and innovative in configuration for the time. Businesses on the first floor included a grocery store, barber shop, shoe store, cab company, drug store, coffee shop, liquor store, cocktail lounge, and an insurance company.[46]

The Northward Building was also the subject of a novel taking place in Fairbanks (called Baranof in the text), entitled *Ice Palace*. Edna Ferber's novel was published in 1958, just before statehood, and many locals inspired the main characters in the book.[47] In the novel, Ferber changes the Northward Building's name to the Kennedy Building, which is also called the Ice Palace by the locals. The size of the building and other details are exaggerated. She describes the building in the second chapter as:

> "Fourteen stories high, with the wilderness stretching away thousands of miles in all directions… It was Alaska's first apartment house. People fought




*Map of complex. Building department property file.*

[43] Alaska Office of History and Archaeology, *215 and 219 Ladd Avenue*, AHRS card number FAI-02664, November 14, 2018.

[44] Terrence Cole, *Ghosts of the Gold Rush: A Walking Tour of Fairbanks* (Fairbanks, Alaska: Tanana-Yukon Historical Society, 1977), 27.

[45] Ray Bonnell, "The Northward Building still stands out downtown Fairbanks," *Fairbanks Daily News-Miner*, January 16, 2016.

[46] "Glittering All-Metal Northward Building Nearing Completion," *Fairbanks Daily News-Miner*, November 15, 1951.

[47] Terrence Cole, *Ghosts of the Gold Rush: A Walking Tour of Fairbanks* (Fairbanks, Alaska: Tanana-Yukon Historical Society, 1977), 27-28.

*Queen's Court Unit, 2020.*

to live in it. Townsmen, dwelling in their frame houses and wrestling with the regional problems of heating, lighting, plumbing, water, were madly envious of Ice Palace tenants."[48]

When the Chena River flooded in 1967, downtown residents sought refuge in the high rise of the Northward Building when the extreme overflow forced them out of their homes.[49]

The building still stands today, but many of the shops on the first floor have been replaced by offices. Residences on the floors above are still inhabited. The building's exterior looks much the same as did when it was constructed; however, the interior of the building was updated in 2001.[50]

## Queen's Court

Queen's Court was an apartment complex – the first in Fairbanks – built in 1950, in response to the housing shortage in Fairbanks. The newspaper described the complex as having "accommodations beyond anything the old sourdough ever visualized in Fairbanks." Almost as soon as each portion of the construction was completed on the million-dollar housing project, each unit was filled.[51] The first to move into the units were three military families and one civilian. At this time, a total of 104 families were on the waiting list for the other units.[52] The complex was designed by architect Robert B. Price of Tacoma, Washington, in collaboration with the Edgar S. Philleo Engineering Service of Fairbanks.

[48] Edna Ferber, *Ice Palace* (New York City, New York: Vintage Books, 2014).

[49] Alaska Office of History and Archaeology, *Northward Building*, AHRS card number FAI-01856, August 13, 2010.

[50] Ray Bonnell, "The Northward Building still stands out downtown Fairbanks," *Fairbanks Daily News-Miner*, January 16, 2016.

[51] "Queen's Court Was First of New Type Units," *Fairbanks Daily News-Miner*, November 15, 1951.

[52] "First Families Occupy New City Project," *Fairbanks Daily News-Miner*, January 4, 1951.

*Fairview Manor, c. 1970s.* *(Alaska Digital Archives)*

The complex consisted of 12 two-story buildings, containing 73 apartments. Rents ranged from $128.50 to $143.00, depending on the apartment, as there were different sizes and some had garages, and included all utilities except for electricity.[53] Larger units on the four-acre property could accommodate up to four people, while the smaller units were ideal for one to two people. The units were modern for Fairbanks, featuring conveniences such as electric ranges, steel kitchen cabinets, and contemporary lighting. Every building had a laundry and drying room and designated areas for extra storage.[54]

According to property files from the 1950s, the complex has also been known as Chena Courts. The apartments also became Eielson Arms Apartments according to a building permit dated from September 15, 1967.[55] An inspection report from November 1980 indicates that the name of the complex had been changed again. The new name is listed as Midtown Apartments, which remains its name as of 2021.[56] Currently, all 12 buildings stand in their original locations off Gilmore Street, although the garages have been removed.

## Fairview Manor

Fairview Manor was a modern apartment complex that accepted its first residents in 1951. The complex was located at the northwest corner of Cowles Street and Airport Road and consisted of 66 units. According to a


*Fairview Manor during 1967 flood.*

*South façade of Tamarac Inn, 2020.*

[53] "Observe Opening of Modern Queen's Court Apartments," *Fairbanks Daily News-Miner*, May 8, 1951.
[54] "Queen's Court Was First of New Type Units," *Fairbanks Daily News-Miner*, November 15, 1951.
[55] City of Fairbanks, Building Application and Permit for Eielson Arms Apartments, September 15, 1967.
[56] Miscellaneous Inspection Report for Midtown Apartments, November 30, 1980.


*Tamarac Inn sign, 2016. Sketches of Alaska website.*

Daily News-Miner article, the installation of a temporary sewer system for the complex cost the city four to five thousand dollars.[57] Another article from November of that year describes the apartments as "ultra-modern" and "the finest type of housing." Listed features of the apartments are electric stoves and refrigerators, a heated garage, ample basement storage space, and automatic washing machines with dryers. The article states that "comparable housing is being put up all over town."[58]

Beginning in 2009, the 13-acre site was razed and redeveloped into low-income housing and the Raven's Landing Senior Campus.

## Tamarac Inn

The Tamarac Inn, located on the north side of the Minnie Street Corridor, was built in 1953. The building was constructed using surplus military huts that were originally located on Ladd Field. The rooms of the motel were one-bedroom apartments that were open for tourists during the summer and rented to military personnel the duration of winter.[59] In 2015, the building was condemned and vacated of its 26 residents due to "substandard conditions."[60]

**The original Quonset hut itself went through two different redesign phases to improve on previous models. The first Quonset was designed by the George A. Fuller Co., a construction firm in New York City with initial huts ready for shipment by June 1941. The original design included wooden purlins, T-sectioned curved ribs, corrugated steel sheeting, all fastened together by nuts and bolts. Almost immediately after the first shipment was released, improvements on the design were being incorporated. Changes resulted in decreased weight and easier transport due to a reduction in the amount of metal used. The two most significant changes implemented in the Quonset II and III models were the use of the composite rib and the nailing groove. This alteration meant that a nail could be driven in the groove between pieces of steel framing. The nail was bent when driven into the channel, which not only strengthened its grip, but also increased the speed of assembly.[61]**

[57] "Untitled Article," *Fairbanks Daily News-Miner*, March 14, 1951.

[58] "New Apartments Ease Housing Shortage in Fairbanks," *Fairbanks Daily News-Miner*, November 15, 1951.

[59] Terrance M. Cole, *Historic Resources of the Minnie Street Corridor* (Fairbanks, Alaska: Alaska Department of Transportation, 1989), 31-32.

[60] "Closure of residential motel Tamarac Inn displaces 26 in Fairbanks," *Fairbanks Daily News-Miner*, January 6, 2015.

[61] Catherine Williams, *Identification Guide to "Quonset" Arched Building Types*, Unedited draft circulated for review and comment, Northern Land Use Research, Inc., 2003, 11-14.

# WORLD WAR II SITES

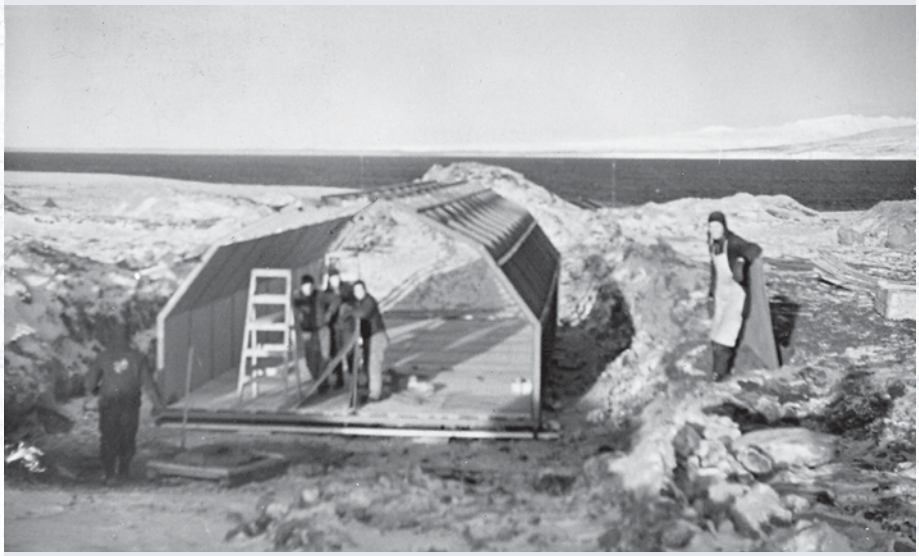
## Quonset Huts

The Quonset hut and subsequent look-alikes were inspired by the Nissen hut of World War I. Designed by Lieutenant Colonel Peter Norman Nissen of the British Royal Engineers, the Nissen hut was intended to be an improvement to the tents as military temporary shelters. Although the huts were superior in many ways, they were more laborious in construction than was desirable.[62] The United States Navy set out to make its own version of the structure at the beginning of World War II. Although not involved in the war at that point, the United States needed a temporary building to provide shelter for overseas personnel during the Lend-Lease program. The desired design qualities were that it be inexpensive, portable, be easy to construct, and be functional and reliable in a variety of climatic conditions.[63]

The name "Quonset" came from the location where the building parts were developed and distributed, Davisville Construction Battalion Center, located next to Quonset Point Naval Air Station, Rhode Island. Although the official name of the building was "Steel Arch Rib Hut," the "Quonset" nickname stuck. After production of Quonset huts for the Navy began, other companies developed their own versions of the buildings to sell to the military. The Cowin Company and the Butler Manufacturing Company made variations commonly found on military installations. Other companies altered their Quonset hut design to fit specific needs, such as the Pacific hut, which was made from wood due to a shortage of steel during wartime.[64]

After the war, Quonset huts were seen as a solution to the housing shortage as veterans returned home.[65] Quonset settlements were constructed in many communities to solve this problem

*Interior of Quonset hut.* *(UAF Archives)*



*Example of Quonset being constructed.* *(UAF Archives)*

[62] Julie Decker and Chris Chiei, *Quonset Hut: Metal Living for a Modern Age* (New York, NY: Princeton Architectural Press, 2005), 4.

[63] Catherine Williams, *Identification Guide to "Quonset" Arched Building Types*, Unedited draft circulated for review and comment, Northern Land Use Research, Inc., 2003, 4-5.

[64] Catherine Williams, *Identification Guide to "Quonset" Arched Building Types*, Unedited draft circulated for review and comment, Northern Land Use Research, Inc., 2003, 11-14.

[65] Julie Decker and Chris Chiei, *Quonset Hut: Metal Living for a Modern Age* (New York, NY: Princeton Architectural Press, 2005), 68.

*Eberhardt Quonset, west façade, 2019.*

under a federal Public Housing Authority program.[66]

Over the years, Alaskans have had a love-hate relationship with the Quonset hut, but they remain a familiar sight in the built environment throughout the state. Like the rest of the country, Alaska experienced an extreme housing shortage after the war. In May 1945, the Anchorage Daily Times advertised a military surplus sale with the heading, "Sale of Huts to Aid Housing." With this, however, came major backlash with worry about the safety and appearance of the buildings. The surplus sale never occurred due to complaints, as the structures were considered eyesores, and a ban was passed on the buildings within city limits. Outside the city limits, however, Quonsets appeared around Anchorage. Similar controversies over the huts sprang up in other cities, such as Seward and Fairbanks.[67]

Although looked down on as housing, the Alaska Railroad adopted Quonsets for housing personnel in many locations. They were procured from World War II military installations such as Whittier and Dutch Harbor and shipped where needed. Civilians also expressed an interest in the buildings, and the first

*Eberhardt Quonset, south façade, 2019.*

sale of surplus to Alaska's population took place in at Fort Raymond in 1944. This surplus sale proved to be very successful. According to an appraisal of the Quonset huts' 1947 market value, a lightly used hut cost $50 for the 24' x 60' model and $25 for the 16' x 36' model.[68]

With time, advertisements for the sale of surplus huts went away, but Quonsets remained popular for other purposes.[69] The buildings were used throughout Alaska for small businesses, sporting event venues, schools, and churches.[70] Quonsets fit well with the often "make-do with what you have" disposition of Alaskan living.[71]

### *Eberhardt Quonset*

The Quonset hut located on the Eberhardt Homestead (now the location of A Taste of Alaska Lodge) was bought by Walter Eberhardt and his wife after World War II. Eberhardt served in the U.S. Army Air Corps and eventually moved to Alaska with his wife in 1947, where they homesteaded 160 acres off of Chena Hot Springs Road. Eberhardt, like many other civilians in the area, took a job as a teamster truck driver on Ladd Field when it was expanded after the war.[72]

The Quonset hut that still resides on their homestead was purchased as

[66] Julie Decker and Chris Chiei, *Quonset Hut: Metal Living for a Modern Age* (New York, NY: Princeton Architectural Press, 2005), 72.

[67] Julie Decker and Chris Chiei, *Quonset Hut: Metal Living for a Modern Age* (New York, NY: Princeton Architectural Press, 2005), 106-108.

[68] Julie Decker and Chris Chiei, *Quonset Hut: Metal Living for a Modern Age* (New York, NY: Princeton Architectural Press, 2005), 110-112.

[69] Julie Decker and Chris Chiei, *Quonset Hut: Metal Living for a Modern Age* (New York, NY: Princeton Architectural Press, 2005), 115-116.

[70] Julie Decker and Chris Chiei, *Quonset Hut: Metal Living for a Modern Age* (New York, NY: Princeton Architectural Press, 2005), 119.

[71] Julie Decker and Chris Chiei, *Quonset Hut: Metal Living for a Modern Age* (New York, NY: Princeton Architectural Press, 2005), 130.

[72] Walter Eberhardt, "Chena Hot Spring Road Early Settlers' Memories Tapes" series, interviewed by Nancy Kuhn, Colleen Herning, Al George and Bruth George, Project Jukebox Digital Branch of the University of Alaska Fairbanks Oral History Program, March 29, 2001, Oral History 2013-05-02, Pt. 1-2.

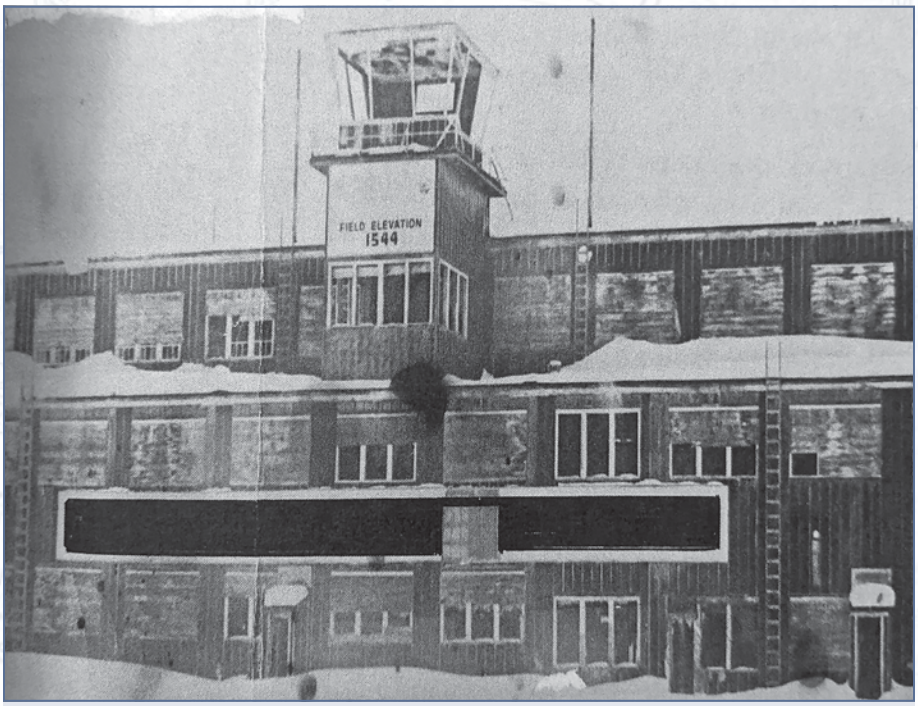
*East façade of 1409 Well Street, 2019.*

*North façade of 1409 Well Street, 2019.*

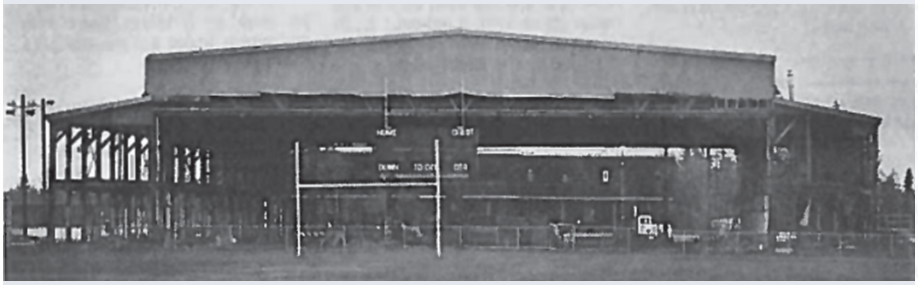
*South façade of 1628 Well Street, 2019.*

*Second story interior of 1409 Well Street, 2019.*

*South façade of 1628 Well Street, 2019.*




*Tanacross hangar, c. 1968.*



*Big Dipper during 1981 renovation. (Fairbanks Daily News-Miner)*

*East façade of Big Dipper, 2020.*

[73] David Eberhardt, interviewed by Kirsten Freeman, October 2019.

[74] https://www.alaskarails.org/historical/Freshour/index.html

[75] "Dipper-type buildings designed for temporary use by military," *Fairbanks Daily News-Miner*, June 6, 1991.

[76] Kathy Price, *The World War II Heritage of Ladd Field* (Fort Collins, Colorado: Center for Environmental Management of Military Lands, Colorado State University), 36.

[77] Hez Ray, *The Big Dipper: A Dream is Born* (Fairbanks, Alaska: 2014), 27.

[78] Hez Ray, *The Big Dipper: A Dream is Born* (Fairbanks, Alaska: 2014), 21.

[79] Hez Ray, *The Big Dipper: A Dream is Born* (Fairbanks, Alaska: 2014), 54, 58.

[80] Hez Ray, *The Big Dipper: A Dream is Born* (Fairbanks, Alaska: 2014), 67-69.

Army surplus from Ladd Air Force Base and moved intact, including its concrete floor, to its current location. The Quonset was moved by Walter's son, David, who founded A Taste of Alaska Lodge in 1992, and is currently used as a shop and storage area.[73]

### *Alaska Railroad Yard Quonsets*

During World War II, the Alaska Railroad was used to transport supplies, construction materials, and personnel from ports in Seward and Anchorage to Fairbanks.[74] The 714th Railway Operating Battalion was assigned to this task between 1943 and 1945. Quonset huts were built in the vicinity of the Fairbanks railyard to support these activities and remain owned by the Alaska Railroad.

## Big Dipper Arena

The Big Dipper Arena building was originally a temporary World War II airplane hangar, designed with an anticipated life span of only five years.[75] The hangar was originally located in Tanacross, a stop along the Northwest Staging Route for Lend-Lease operations during World War II.[76] The building was later purchased for one dollar in 1968 by Hez Ray, a coach at Lathrop High School.[77] Ray envisioned transporting the building to Fairbanks for use as a youth center.[78] The hangar was disassembled in -55° temperatures and hauled to Fairbanks on a convoy of 45 eighteen-wheeler trucks.[79] Although there were plenty of volunteers, including students, the trip was not without challenges. The biggest challenge came when trucks were unable to cross the bridge over the Tanana River at Big Delta. All options were discussed, including unloading the building parts and dragging them across the river. Finally, it was decided the most viable and least time-consuming option was to cut five feet off the legs of the building to prevent damaging the bridge or any building components.[80]

*KFAR Transmitter, unknown date.* *(UAF Archives)*

Once in Fairbanks, other obstacles for the building emerged, and Ray's vision of transforming the hangar into an arena was stalled. First, the disassembled parts of the building were deposited at the construction site and left until spring when reassembly would commence. Once ready for construction, it was discovered that the trusses and beams had partially sunk into the muskeg and mud of the area. The situation was so dire, the military needed to assist using tank retrievers from Fort Wainwright. The current site of the arena was chosen as an alternative because of its stable ground, and everything was moved to the new location.[81] Later, when the building was only partially constructed, it was occupied by a large group of squatters who refused to leave but were eventually forced out.[82] The arena was eventually completed, but remained unheated until a renovation in the 1980s. This renovation cost roughly $6 million to complete and the building re-opened in 1982.[83]

## KFAR Transmitter Building

The KFAR radio station was established in 1939 and later served an important part in aiding Ladd Field during World War II.[84] Austin "Cap" Lathrop, a millionaire industrialist, funded and started the station with the encouragement of his executive secretary, Miriam Dickey. Dickey formerly worked at a radio station in Seattle and believed that building a station in Fairbanks would improve on the feelings of isolation experienced by those living in the Interior.[85] This was the first radio station in Fairbanks and it focused on programming news, public service, music, and sports. An important and popular part of the programming was "Weather Permitting" in the mornings, which announced all the air taxi schedules for the day. This daily announcement was important to those living in outlying areas needing critical cargo.[86]

The KFAR transmitter building was built six miles outside of town, off Farmers Loop Road.[87] The transmitter was connected to the Midnight Sun Broadcasting Co.'s studio, located


*Augie Hiebert at KFAR Studio.*

[81] Hez Ray, *The Big Dipper: A Dream is Born* (Fairbanks, Alaska: 2014), 72-73.

[82] Hez Ray, *The Big Dipper: A Dream is Born* (Fairbanks, Alaska: 2014), 85-86.

[83] "Dipper-type buildings designed for temporary use by military," *Fairbanks Daily News-Miner*, June 6, 1991.

[84] Dermot Cole, *Fairbanks: A Gold Rush Town that Beat the Odds* (Kenmore, Washington: Epicenter Press), 133.

[85] Robin Ann Chlupach, *Airwaves over Alaska: The Story of Pioneer Broadcaster Augie Hiebert* (Issaquah, Washington: Sammamish Press), 34.

[86] Robin Ann Chlupach, *Airwaves over Alaska: The Story of Pioneer Broadcaster Augie Hiebert* (Issaquah, Washington: Sammamish Press), 40.

[87] Robin Ann Chlupach, *Airwaves over Alaska: The Story of Pioneer Broadcaster Augie Hiebert*, (Issaquah, Washington: Sammamish Press, 1992), 43.

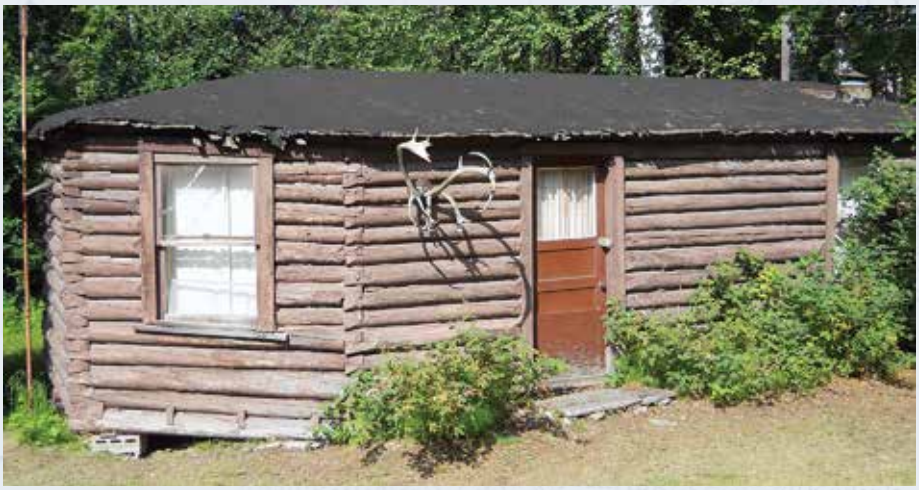
*Kitchen of former KFAR apartment in transmitter building, 2019.*


*Exterior of KFAR transmitter building, 2019.*

*Bathroom of apartment in former KFAR transmitter building, 2019.*

*Sven and Janet Brunberg sit in front of former NCO, c. 1958.*

*Side entrance to former NCO Club, 2019.*



*Brunberg cabin, former NCO Club, 2019.*

*Interior of former NCO Club, 2019.*

at the Lathrop Building in downtown Fairbanks, by a series of poles running lead cable for four miles. Both the tower and the building were built completely grounded, right down to the iron of the reinforced concrete foundation. The tower consisted of a spiral antenna and two directional beams supported by eight telephone poles, with one pointing at San Francisco and the other at New York City. Breaking national news received from these locations were re-broadcast when received at the transmitter building, while local news was broadcast from the main KFAR studios on the fourth floor of the Lathrop Building.[88] The main, middle section of the building housed the transmitter and was used as the workspace, while the east wing was a garage containing the furnace and coal storage. The west wing of the building served as an apartment for transmitter operators Stan Bennett and Augie Hiebert, as the transmitter needed to be manned at all times.[89]

Beginning in the fall of 1941, KFAR radio operators were called upon by the military to extend an early warning emergency network for its listeners. Operator Augie Hiebert teamed up with the military in cooperation with operators across Alaska to implement the Aircraft Warning Service. KFAR also upgraded its power to ten times what it was originally, so that the transmission could offer military navigational services to aircraft, with its most significant contribution taking place on December 7, 1941.[90]

In the early morning hours of December 7, 1941, Augie Hiebert was the first person in Alaska to learn of the attack on Pearl Harbor. Before heading to his post in the control room, he turned on the short-wave radio as he was getting ready for work. It was then that he heard a panicked announcer interrupt the programming with the breaking news that the Japanese attacked Pearl Harbor. After confirming the news, he immediately called Colonel Dale Gaffney at Ladd Field who at first thought the news must be a joke. Augie received word of the attack a full two hours before the military had.[91]

## Non-Commissioned Officer's Club

Prior to the building of Ladd Field, the area was occupied by homesteads. A log cabin that served as the Non-Commissioned Officer's (NCO) Club at Ladd was an original building on the Muatkarjarvi Homestead. Finnish immigrant turned miner, Herman Muatkarjarvi, or Matt Jarvi (his Americanized name), made a claim for his homestead in 1909 and received a patent in 1919. Following his death in 1928, the homestead was purchased by William Campbell, and later owned by Hans Junes. It was acquired by the military in the early 1940s.

In 1958, the building was acquired by Sven and Janet Brunberg, with the original intention of being taken apart for firewood. In email correspondence with Janet Brunberg, she stated:

> "In the fall of 1958, as we were frantically getting ready for the coming winter, (having moved a Quonset onto our property to live in) we were reminded that the barrel stove would require wood to keep us warm. The house mover who had brought in the Quonset from Ladd

[88] "Eight Miles of Copper Wire Plowed Under KFAR Broadcast Station," *Fairbanks Daily News-Miner*, September 9, 1939.

[89] Robin Ann Chlupach, *Airwaves over Alaska: The Story of Pioneer Broadcaster Augie Hiebert*, (Issaquah, Washington: Sammamish Press, 1992), 43.

[90] Robin Ann Chlupach, *Airwaves over Alaska: The Story of Pioneer Broadcaster Augie Hiebert*, (Issaquah, Washington: Sammamish Press), 47.

[91] Robin Ann Chlupach, *Airwaves over Alaska: The Story of Pioneer Broadcaster Augie Hiebert*, (Issaquah, Washington: Sammamish Press, 1992), 47-48.

*Noyes house, known as "Essinoye," c. 1911.* *(Alaska Digital Archives)*

*Noyes house dining room, c. 1911.* *(Alaska Digital Archives)*

[92] Janet Brunberg, email to Sam Urban, summer of 2019.

[93] Janet Brunberg, email to Sam Urban, summer of 2019.

*Noyes house west façade, February 2020.*

> AFB told us that he would move a small log building from the base to our place and we could cut it up for firewood for the winter. He brought it in and I refused to have it cut up as it looked like an antique log cabin to me. He said it had been located on the bank (south bank likely) of the Chena after going through the main gate of Ladd."[92]

Brunberg said the building was put on cement blocks and they added cabinetry, a small stove, a sink and a bunk so that it could be used to house guests. She said the logs of the cabin had moss chinking and a small board that was nailed to the door said, "NCO Club." The building also included a trapdoor and a slightly raised, small platform possibly used as a music stage.[93]

## Noyes House

The Noyes House was built circa 1911 by Fred Noyes and was considered to be one of the grandest homes in Fairbanks during the pioneer era. Fred Noyes, a lumberman from Michigan, settled in Fairbanks in 1903 and started the Tanana Mill Lumber Company. The lumber company's sawmill was located at the mouth of a nearby slough, which was named in his honor.

The lumber company was very successful and facilitated the

*USO reception area, 1957.* *(UAF Archives. 2012-084, folder 4)*

construction of the only three-story house in Fairbanks at the time, called "Essinoye" by its owners.[94] The interior boasted mahogany paneled walls and coffered ceilings in the dining room.[95] The first floor had nine-foot ceilings and included a parlor, library, and kitchen while the second floor had four bedrooms and bathroom and the third floor was a billiards room.

In 1925, the house was purchased by the Fairbanks Exploration Company to house visiting employees. In 1928, the interior was altered into apartments for employees and two bedrooms and a bathroom were added to the first floor.[96] When World War II began, the building was loaned to the military. It housed the Soviet Commander and his staff, gaining a reputation as "a big party place."[97] Parties hosted there were extravagant, with significant quantities of wine and food, according to Thelma Walker.[98]

In 1959, the building sold again for use as a funeral chapel, and the interior was altered. A 1961 fire destroyed much of the interior of all three floors and much of the roof. Although the third floor was a loss, the house was repaired and a new gable roof was installed above the second floor.[99]

*Original exterior of USO building.* *(UAF Archives, 2012-04-253)*


*USO stage at an event featuring Native dancing.* *(UAF Archives. 2012-084-153)*

## Original United Service Organizations (USO) (1st Ave.)

The original United Service Organizations (USO) building in Fairbanks opened as a recreation center in May 1942. The riverfront lot on which it was located had been purchased by Austin "Cap" Lathrop in 1941 who, in turn, sold it to the City of Fairbanks for half the purchase price with the condition that it be given to the military.[100] It was constructed of former Army barracks with additions and alterations.[101]

Once the USO building was completed, the main hall served as a reception area, with another section used as a dance floor. One of the wings off the main hall held smaller rooms reserved for meetings and writing and reading activities. The partial basement served as a canteen. Another identical wing, constructed in 1945, provided space for social activities and dances.[102] Although

[94] Ray Bonnell, "Street Widening Gives Clearer View of Historic Noyes House," *Fairbanks Daily News-Miner*, October 12, 2013.

[95] National Register of Historic Places, Registration Form, Illinois Street Historic District, July 31, 2001, 7.

[96] National Register of Historic Places, Registration Form, Illinois Street Historic District, July 31, 2001, 7.

[97] Kathy Price, *The World War II Heritage of Ladd Field, Fairbanks, AK*, ed. Glenda R. Lesondak (Fort Collins, CO: Colorado State University, 2004), 78.

[98] Kathy Price, *The World War II Heritage of Ladd Field, Fairbanks, AK*, ed. Glenda R. Lesondak (Fort Collins, CO: Colorado State University, 2004), 78.

[99] National Register of Historic Places, Registration Form, Illinois Street Historic District, July 31, 2001, 7.

[100] Library of Congress, "USO Recreation Center," Historic American Buildings Survey, Library of Congress website, call number HABS AK, 6-FAIBA, 2, https://www.loc.gov/pictures/item/ak0214.sheet.00001a/.

[101] "Fairbanks USO Offers Lodging, Food, Discounts," *Eielson Times*, March 26, 1970, University of Alaska Fairbanks, Alaska Polar Regions Collections & Archives, United Service Organization (USO), Fairbanks, Alaska Collection, Acc. 2012-084, USO scrapbook.

[102] Library of Congress, "USO Recreation Center," Historic American Buildings Survey, Library of Congress website, call number HABS AK, 6-FAIBA, 2, https://www.loc.gov/pictures/item/ak0214.sheet.00001a/.

*Former USO site, now Golden Heart Plaza, 2020.*


*USO building after 1963 renovation.* *(UAF Archives)*

[103] June McDonald, "Pioneer Tapes," interview by Margaret van Cleave, Project Jukebox, Digital Branch of the University of Alaska Fairbanks Oral History Program, June 7, 2014, call number 94-13-11.

[104] Library of Congress, "USO Recreation Center," Historic American Buildings Survey, Library of Congress website, call number HABS AK, 6-FAIBA, 2, https://www.loc.gov/pictures/item/ak0214.sheet.00001a/.

[105] "Face-Lifting Announced for USO Building Here," *Fairbanks Daily News-Miner*, June 27, 1962.

[106] Library of Congress, "USO Recreation Center," Historic American Buildings Survey, Library of Congress website, call number HABS AK, 6-FAIBA, 2, https://www.loc.gov/pictures/item/ak0214.sheet.00001a/.

[107] "Face-Lifting Announced for USO Building Here," *Fairbanks Daily News-Miner*, June 27, 1962.

[108] *Eielson Times*, March 26, 1970, University of Alaska Fairbanks, Alaska Polar Regions Collections & Archives, United Service Organization (USO), Fairbanks, Alaska Collection, Acc. 2012-084, USO scrapbook.

[109] Library of Congress, "USO Recreation Center," Historic American Buildings Survey, Library of Congress website, call number HABS AK, 6-FAIBA, 2, https://www.loc.gov/pictures/item/ak0214.sheet.00001a/.

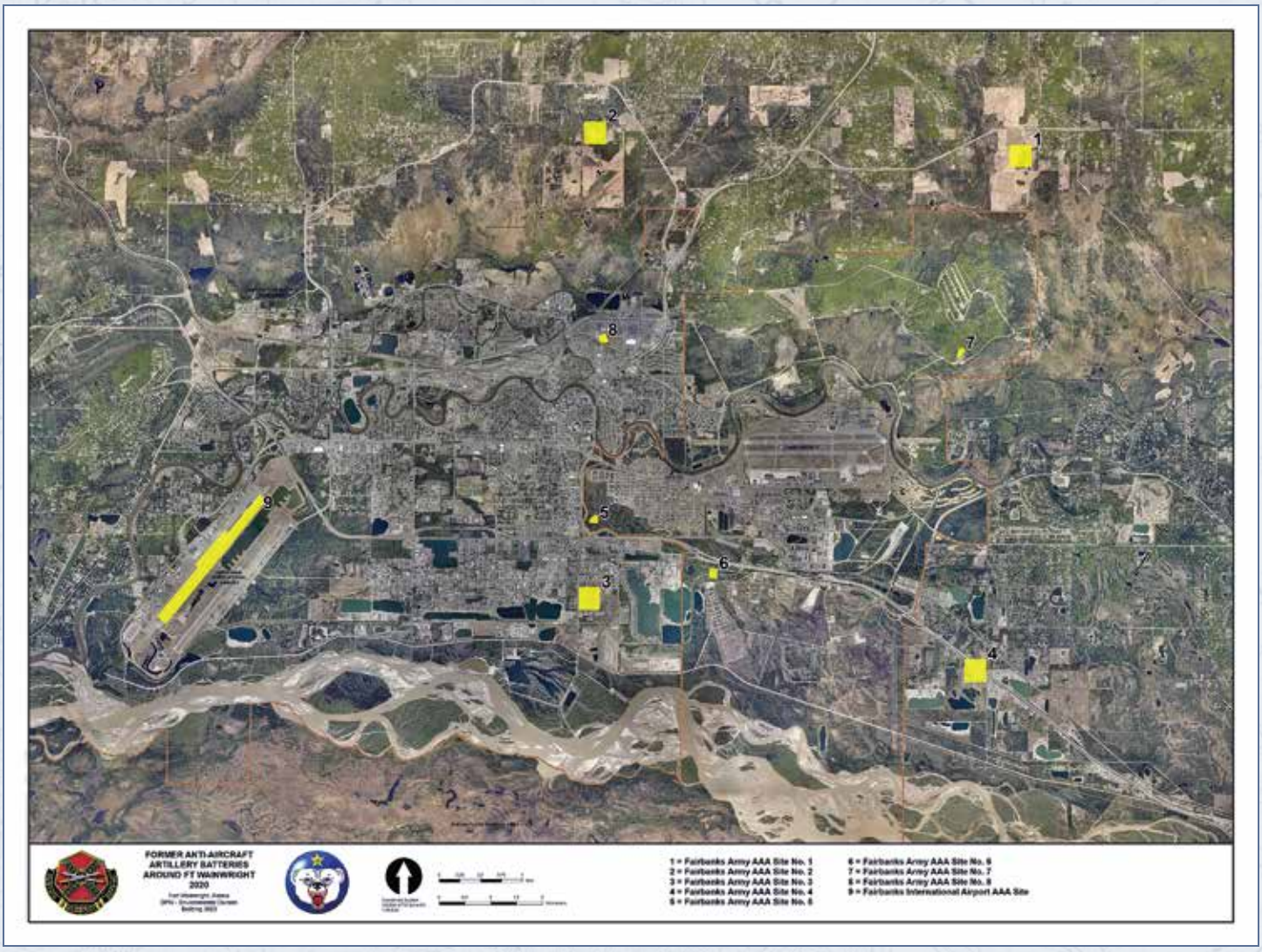
the USO of Fairbanks operated much the same as others, the extreme winter temperatures necessitated increased use to offer special programs for a warm place to socialize and relax. Dances were held at the building a few times a week, and special dinners were provided to the soldiers through meal contributions from local residents interested in supporting the war effort.[103] Additionally, unlike other USO clubs, the Fairbanks location remained open long after the end of World War II, adapting to the changing times and needs of those in the service. It was a place frequented often by single servicemen from the remote Nike sites during the Cold War.[104] The club was also a popular place for civilians. A Daily News-Miner article from 1962 reported that, over the course of the previous year, more than 99,000 people visited the USO, with over 3,000 civilians attending programs there.[105]

The building itself showed little change over the years. In 1963, a stone veneer was applied to the front façade facing First Avenue, incorporating native rock and completed by a local mason.[106] It was a cooperative project, the majority of materials used being donations from Fairbanks residents and the military delivering items to the site.[107] The same year, the basement was altered to serve as economical short-term dormitory for up to 47 male military personnel.[108] The USO was closed in 1983 and razed for a city riverfront project.[109]

# COLD WAR SITES

## AAA Sites (1952-1959)

In response to the conflict with Korea during the Cold War, Anti-Aircraft Artillery (AAA) batteries were constructed with the aim of protecting the commercial airports and Air Force bases of Alaska. Twelve AAA sites were erected in the Anchorage area and nine




*Map of all eight AAA sites located in the Fairbanks North Star Borough.*

*Quonset hut located on south end of AAA Site No. 1, 2019.*

*One of many 55-gallon drum structures on AAA Site No. 1, 2019.*


*Interior of one of the 55-gallon structures on AAA Site No. 1.*

*Interior structure of one of the 55-gallon structures on AAA Site No. 1, 2019.*

were installed around Fairbanks. The nine sites in Fairbanks were strategically placed to form a perimeter around the Ladd and Eielson Air Force Bases. Some of these sites were located on what is now the cantonment of Fort Wainwright. Others – including AAA Sites No. 1, 2, 3, 4, and 8 – were located in the surrounding community. Only sites 1 through 4 are partially standing as of publication. An additional site, No. 9, was located where the present-day Fairbanks International Airport stands.

The typical AAA site consisted of 12 Quonset huts serving as an administration area and garrison. Administration buildings usually consisted of two or three Quonsets intersecting at a central wood-framed building. The remainder of the Quonsets were lined up in two rows in front of the administration building, and a radar shelter was usually close by. Other structures on the site included three revetments, a semi-subterranean ordnance shop, ammunition magazines and a fuse storage shelter. Many of these structures were constructed using 55-gallon drums filled with earth, some incorporating wood framing.[110] The battery sites originally contained 90 mm guns that were later replaced with 120 mm guns. The guns employed at the sites proved to be inadequate in later years, as range capabilities could not meet advancing technology. The AAA sites were phased out around 1958, being replaced by the Army's first guided defense missile system.[111]

*Entrance to one of the 55-gallon structures on AAA Site No. 1, 2019.*

*West facade of one of the AAA Site No. 2 Quonsets, 2019.*

[110] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 66-67.

[111] Kristy Hollinger, *Nike Hercules Operations in Alaska: 1959-1979* (Fort Wainwright, AK: Conservation Branch, Directorate of Public Works, U.S. Army Garrison Alaska, 2004), 6.

*Interior of one of the AAA Site No. 2 Quonsets, 2019.*


*Former entrance to Grubstake Feed Company located inside AAA Site No. 2 administration building, 2019.*

## AAA Site No. 1

AAA Site No. 1 is located just south of mile 3 on Chena Hot Springs Road. The land for the site was acquired in May 1952, consisted of 40 acres, and was one of eight sites used in the AAA system perimeter for Ladd Air Force Base.[112] At the time of construction, Chena Hot Springs Road did not exist and access was made using Steel Creek Road. According to Cora Gamble, an area homesteader, the military used a "back road by the graveyard" to access the battery site. Military use

*Aerial view of AAA Site No. 3, Fairbanks North Star Borough GIS, 2017.*

*Some of the AAA Site No. 3 Quonsets, 2020.*

[112] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 176.

*Aerial view of AAA Site No. 4, Fairbanks North Star Borough GIS, 2017.*

*Some of the Quonsets at AAA Site No. 4, 2020.*

resulted in the betterment of roads that also benefitted neighboring residents.[113] Gamble said that once a month there were firing exercises and everyone in the neighboring properties evacuated. Military personnel would transport residents to AAA Site No. 1 for three to four hours where they would be fed and kept safe during the drills.[114]

In 1958 when the site was no longer needed, the Army transferred some of the buildings off-site, including 16 Quonset huts. Four were sold to private individuals and the remainder were donated to the Civil Defense Agency and the State of Alaska. The rest of the buildings were left on site and the guns were removed. The land was managed by the Bureau of Land Management and the road and utility easements were restored to the original landowners.[115] Remaining structures at the site include two ammo storage areas made from lumber and oil drums, six deteriorated timber frame, eight bunkers constructed from lumber and oil drums, a Quonset hut, and a concrete foundation.

### *AAA Site No. 2*

AAA Site No. 2 is located south of mile 3 of Farmers Loop Road. From 1952 to 1958, the land for the site was leased from a private party. The site was later owned by George Dornath and was later leased to the Alaska Feed Company, which used most of the buildings for storage and office space. This was considered one of the best preserved sites previously used by the military.[116] Remaining structures include seven Quonset huts and a variety of structural debris and oil drums.

### *AAA Site No. 3*

AAA Site No. 3 is located south of the Mitchell Expressway, off S. Cushman Street. The land was leased from 1952 to 1958, from a private party and consisted of 18 Quonset huts, two wood frame buildings, utility lines, gun emplacements, and bunkers. At

[113] Henry Gettinger, "Chena Hot Springs Road Early Settlers' Memories Tapes," interview by Al and Bruth George, Project Jukebox, Digital Branch of the University of Alaska Fairbanks Oral History Program, April 17, 2020.

[114] Cora Gamble, "Chena Hot Springs Road Early Settlers' Memories Tapes," interview by Nancy Kuhn, Al George and Bruth George, Project Jukebox, Digital Branch of the University of Alaska Fairbanks Oral History Program, March 6, 2001, accession number uaf.4285135.

[115] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 176-177.

[116] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 177.


*South and east façades of Armory, 2020.*

the lease's end, Army improvements were sold to the property owner rather than the government restoring the land. Remaining structures include 11 Quonset huts and two wood frame buildings.

### *AAA Site No. 4*

AAA Site No. 4 is located off the Richardson Highway, about seven miles southeast of Fairbanks. From 1952 to 1957, the site was leased from a private party.[117] It is unknown how many buildings were originally located at the site, but there are nine Quonset huts and the administration building made of multiple Quonset huts standing at the time of publication.

## Fairbanks Armory

The Fairbanks Armory is located on the southwest corner of Second Avenue and Wien Street. The Alaska National Guard, formed during the Cold War, sought to utilize the Alaska Native population's knowledge of regional terrain and weather and played a crucial role in the defense of Alaska during the Cold War.[118] The Fairbanks Armory property was leased to the Guard in 1961 by the City of Fairbanks and the building was designed by the Alaska Architectural and Engineering Company of Fairbanks.

*Haines-Fairbanks Pipeline fuel terminal located at Birch Hill, 2002.*

Construction was completed in 1962 and the building served Company E, 3rd Battalion Group of the 297th Infantry; the 216th Transportation Company; and the 2nd Engineer Platoon, 910th Engineer Company. In 1997, the building was renovated with new doors, windows, and exterior siding and a large addition extending the south and west sides that more than doubled the size of the building.[119]

## Haines-Fairbanks Pipeline

The Haines-Fairbanks Pipeline was created in response to the need for a fast and reliable means of transporting fuel to Fort Greely, Eielson Air Force Base, and Ladd Air Force Base.[120] Although fuel from oil tankers traveled by rail to the Interior, shipments were

[117] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 180.

[118] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 254.

[119] Alaska Office of History and Archaeology, *Fairbanks Armory Building*, AHRS card number FAI-02301, August 15, 2014.

[120] Kristy Hollinger, *The Haines-Fairbanks Pipeline*, (Fort Wainwright, AK: US Army Garrison Alaska, Directorate of Public Works, Conservation Branch, 2003), 5.

*Western edge of Murphy Dome site, 2020.*

often delayed and depended on space available and priority of supplies. The Haines to Fairbanks route was chosen to keep the pipeline in the vicinity of existing infrastructure. The pipeline followed the Haines Highway and then the Alaska-Canadian (ALCAN) Highway to Fairbanks. Keeping the pipeline near the highways was crucial so equipment could be transported during the construction process and easily accessed for future maintenance.[121] Design of the pipeline occurred from 1950 to 1952, construction lasted 22 months, and the pipeline was operational in 1955.

Military Sea Transportation Tankers delivered fuel to a tank farm in the Lutak Inlet at Haines.[122] From there the fuel traveled through a series of pump stations and fuel terminals to reach Fairbanks. Fuel delivery points were located at Fort Greely, Eielson Air Force Base, and finally Fairbanks, which also functioned as a pump station. Pump stations were self-supporting, with their own electrical, sewage, water and heating systems. Housing was provided for workers and families, often in the form of bachelor quarters or apartments.[123] Four kinds of fuels were transported through the 626 miles of the pipeline, including jet fuel, aviation gas, automotive gas, and diesel.[124]

The pipeline was in use for 16 years until it was discovered that some sections were deteriorating and the southern half of the system was shut down.[125] Smaller areas of the pipeline were utilized for eight additional years, however, and the section between Eielson Air Force Base and Fort Wainwright was operational until 1992.

[121] Kristy Hollinger, *The Haines-Fairbanks Pipeline*, 7.

[122] Kristy Hollinger, *The Haines-Fairbanks Pipeline*, 23.

[123] Kristy Hollinger, *The Haines-Fairbanks Pipeline*, 16-17.

[124] Kristy Hollinger, *The Haines-Fairbanks Pipeline*, 1.

[125] Kristy Hollinger, *The Haines-Fairbanks Pipeline*, 1.

## Murphy Dome

Alaska's radar and air defense was concentrated in the Aleutians during World War II, but with the Cold War and the threat of the Soviet Union, that location was no longer ideal. The radar used during World War II also used dated technology that was no match for the Soviet Union's long-range bomber program. Both the Alaska Air Command and a joint Army-Navy board began studies around 1947 to determine the requirements for new radar sites. Although each group decided over 20 sites were needed, due to budget constraints only 12 were funded, one being the Murphy Dome site. These sites were all part of the Aircraft Control & Warning (AC&W) system of long-range radar. Construction of these sites began in 1950 and was difficult due to terrain and harsh weather conditions, labor and transportation issues. The first AC&W stations became operational between 1951 and 1954. Murphy Dome came on line in 1952.[126] An overhaul of the AC&W system was recommended in 1974 but was not upgraded until the mid-1980s. The system was switched to the Alaskan Regional Operations Control Center (ROCC) that remotely handled radar data, reducing the manpower needed at stations.[127]

Murphy Dome was constructed with greater ease than most of the AC&W sites, due to an already existing road. The station initially used Search and Height Finding Radar of the 744th Aerospace Defense Squadron.[128] It was later used as a link in the Ballistic Missile Early Warning System (BMEWS) phase of the White Alice Communication Systems starting in 1960.[129] In 1986, a Minimally Attended Radar (MAR) system was implemented at the site. Most of the original buildings have been removed, but building #214 (a radome tower) and building #1001 (for communications), both constructed in 1960, are still standing.[130]

*Nike Site near Fairbanks (U.S. Army photo)*

*Guard dog and handler, Site Tare, 1964.*

## Nike Hercules Sites (1959-1979)

As early as 1945, the military recognized that a higher level of air defense was needed for the war effort, resulting in the guided missile system known as the Nike Ajax project. It was developed in response to the Soviet detonation of a nuclear device and the start of the Korean War. Nike Ajax operations hit their peak in 1954 with 200 locations established around the United States, but it was soon apparent that the range capabilities of the system had shortcomings. Work began on the improved second-generation model, Nike Hercules.

Nike Hercules replaced its predecessor beginning in 1958. In many cases, Ajax sites were converted to Hercules sites; however, fewer Hercules sites were needed due to the increase in range capability from 25 to 75 miles. Other improvements over the first model included the option of using either high yield explosives or nuclear weapons.[131] In the United States, 145 Nike Hercules

[126] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 120-121.

[127] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 123-124.

[128] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 161.

[129] Alaska Office of History and Archaeology, *Murphy Dome Northern Control Center*, AHRS card number FAI-00341, June 5, 1995.

[130] Alaska Office of History and Archaeology, *Radome Tower Building and Communication Facility*, AHRS card numbers FAI-00630 and FAI-00632, July 17, 1998 and April 8, 1999.

[131] Kristy Hollinger, *Nike Hercules Operations in Alaska: 1959-1979* (Fort Wainwright, AK: Conservation Branch, Directorate of Public Works, U.S. Army Garrison Alaska, 2004), 6.

*Radome and clamshell at Site Tare.*

*Remaining structure at Site Tare, 2019.*

[132] Kristy Hollinger, *Nike Hercules Operations in Alaska: 1959-1979* (Fort Wainwright, AK: Conservation Branch, Directorate of Public Works, U.S. Army Garrison Alaska, 2004), 9.

[133] Kristy Hollinger, *Nike Hercules Operations in Alaska: 1959-1979* (Fort Wainwright, AK: Conservation Branch, Directorate of Public Works, U.S. Army Garrison Alaska, 2004), 11.

[134] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 267.

[135] Kristy Hollinger, *Nike Hercules Operations in Alaska: 1959-1979* (Fort Wainwright, AK: Conservation Branch, Directorate of Public Works, U.S. Army Garrison Alaska, 2004), 1.

[136] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 270.

[137] United States Army, Alaska, *Cold War Resources Inventory: Fort Richardson, Fort Wainwright, Fort Greely*, (Fort Collins, Colorado: Center for Ecological Management of Military Lands, Colorado State University, 2000), 16.

[138] United States Army, Alaska, *Cold War Resources Inventory: Fort Richardson, Fort Wainwright, Fort Greely*, (Fort Collins, Colorado: Center for Ecological Management of Military Lands, Colorado State University, 2000), 15.

[139] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 81.

batteries were deployed, with 37 of these sites designed for the Hercules system specifically, including the eight batteries constructed in Alaska.[132]

Alaska Nike Hercules batteries began operating in 1959, with the exception of Site Love, which became operational the following year.[133] Of the eight sites in Alaska, three were located near Anchorage and five close to the area of Fairbanks. The five locations around Fairbanks were Nike Site Tare (Battery A), Nike Site Peter (Battery B), Nike Site Mike (Battery C), Nike Site Jig (Battery D), and Nike Site Love (Battery E). The Fairbanks batteries were manned by the 2nd Missile Battalion, 562nd Artillery.[134] Of these sites, only two were located outside of Army training areas and within the borough, Site Tare and Site Love.

The Alaskan remoteness and its climate meant that the Nike sites operated and looked different than most of the other sites around the United States. First, Alaska was one of only two states allowed to practice live missile firing tests. Second, because of the extreme temperatures of Alaskan winters, the design of Nike sites in the region needed modifications.[135] During the most extreme weather in Alaska, a Hercules site might need to be operational in windy and icy conditions, at temperatures reaching as cold as 60° F below zero. Because of these extreme conditions, solutions such as mechanical radar covers and de-icing technology were employed.[136] A typical Nike site was manned 7 days a week, 24 hours a day, by up to 125 people.[137]

Nike Hercules sites in Alaska consisted of two areas: a launch area and a battery control area. These two areas were separated, with battery control at a higher elevation than the launch area to ensure a clear line of sight.[138] The structures located at the launch area included two launch structures, warhead storage, a missile assembly building, a control building, and a kennel for guard dogs on site.[139] The battery control area


*Remaining structure at Site Tare, 2019.*

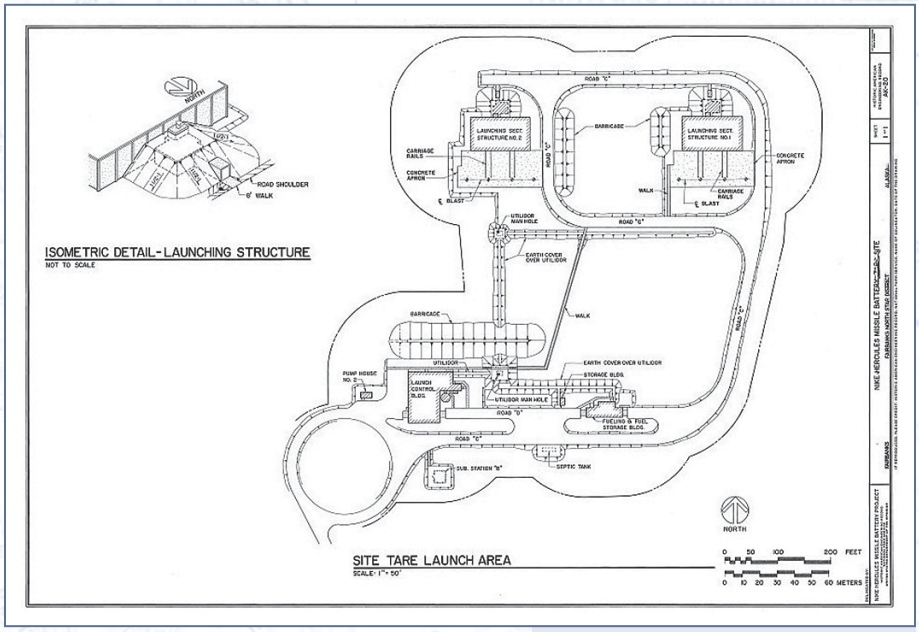
*Structure at launch area of Site Tare before inactivation.*

of a Hercules site included three primary buildings: a High Power Acquisition Radar (HIPAR), an operations building used for target and missile tracking, and barracks.[140] The barracks building included office space, a post-exchange (PX), dining facilities, and a day room.[141] This was a far improvement in comfort over AAA sites in which conditions were often harsher, especially in the sub-zero climate of winter.[142] In fact, each of the Nike Hercules sites was comparable to a small city, having its own utilities, steam plant, communications facilities, and emergency power facilities.[143]

By the late 1960s, the Soviet Union developed intercontinental ballistic missiles (ICBMs), making the missiles and technology used at Nike sites obsolete.[144] While the three Hercules batteries located around Anchorage continued operating up until 1979, the five sites around Fairbanks were inactivated by May 1971.[145]

### *Nike Site Tare (partially demolished)*

Nike Site Tare is located approximately 19 miles southeast of Fairbanks. The site operated from 1959 to 1971.[146]




*HABS drawing of Site Tare launch area.*

*Remaining structure at Site Tare, 2019.*

According to Roger Babler and Ed Hansen, who served at Battery A (Site Tare), the site supported between 100 to 120 workers at any given time. Civilians and military personnel jobs included manning operations and equipment, cooking, dog handling, generator operations, and guard duty. Military personnel were relieved every 24 hours. On off-duty days, personnel performed eight hours of maintenance and cleaning duties around the site, after which they remained off until the next morning. This schedule was altered when a battery was on "hot" duty, meaning the battery was ready to fire a missile in a certain timeframe. During hot duty, there was no off time. If a call came in about a threat, a siren was activated, and everyone reported for duty quickly.

Because of the rotations, personnel often knew only workers from their shifts. There was little exchange

[140] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 268.

[141] Col Francis Pl LeMere, Annual Service Practice: 2d Missile Battalion, 562d Artillery (Nike Hercules), 1963, University of Alaska Fairbanks, Alaska Polar Regions Collections & Archives, Military in Alaska Collection ca. 191-, Acc# 87-073, 2003-042, Guest Welcome Hand Out, Annual Service Practices file, 4.

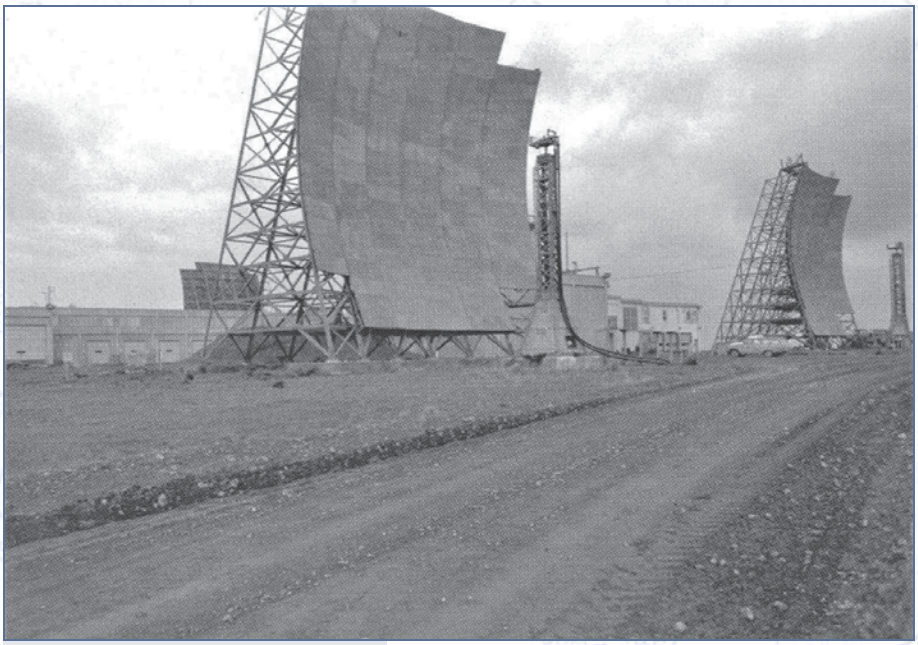
[142] Kristy Hollinger, *Nike Hercules Operations in Alaska: 1959-1979* (Fort Wainwright, AK: Conservation Branch, Directorate of Public Works, U.S. Army Garrison Alaska, 2004), 6.

[143] Col Francis Pl LeMere, Annual Service Practice: 2d Missile Battalion, 562d Artillery (Nike Hercules), 1963, University of Alaska Fairbanks, Alaska Polar Regions Collections & Archives, Military in Alaska Collection ca. 191-, Acc# 87-073, 2003-042, Guest Welcome Hand Out, Annual Service Practices file, 4.

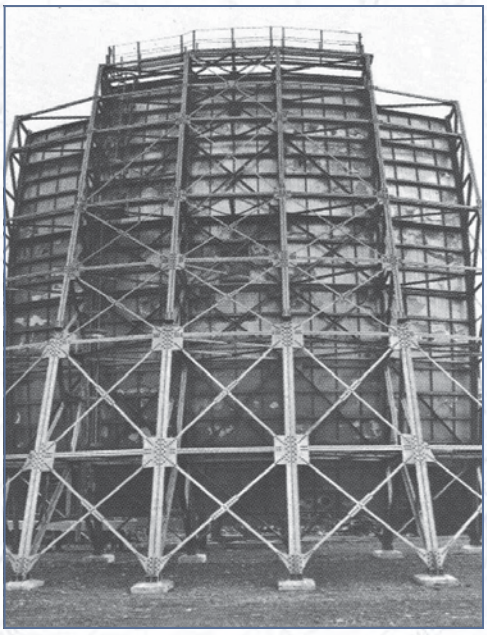
[144] United States Army, Alaska, *Cold War Resources Inventory: Fort Richardson, Fort Wainwright, Fort Greely*, (Fort Collins, Colorado: Center for Ecological Management of Military Lands, Colorado State University, 2000), 7.

[145] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 274.

[146] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 266.



*Tropospheric billboard antennas. (From White Alice Communications System, U.S. Army Corps publication)*



*Rear view of tropospheric antenna. (From White Alice Communications System, U.S. Army Corps publication)*

between work crews due to the isolated nature of the work and security concerns. Secrecy was the norm where, Hansen said, "If you didn't need to know, nobody'd tell you. So the launch people didn't tell us about the missiles and we didn't tell them about the radar." Aspects of the mission were highly secretive and many of the junior personnel did not realize the full scope of the operations where they worked until many years later when information was declassified.

With the exception of those who lived off-site with families, many personnel did not regularly leave the site. Babler recalled that single servicemen left occasionally to visit town, and others would explore the area, fish and hunt, or ski and snowshoe in the winter months.[147] At deactivation, the site's buildings were abandoned.[148] On February 19, 1976, the *Fairbanks Daily News-Miner* advertised the sale of both Nike Site Peter and Site Tare.[149] The site was sold and partially used for the Chena Lakes Recreation Area, with the control area demolished, the rest of the site restored, and the launch bunkers reused.[150]

## Nike Site Love (demolished)

Nike Site Love was located roughly ten miles north of Fairbanks and was operational from 1960 to1971.[151] A *Fairbanks Daily News-Miner* article from 1959 listed the cost of construction at $3,023,969.05.[152] This was the northernmost site of all the Nike Hercules batteries and was accessed via the Elliot Highway and Murphy Dome Road. The site had approximately 100 officers and enlisted personnel at a time who were rotated after 18 months to a different assignment with the Army. Civilians lived on site to provide needed services such as maintenance to the roads and buildings.[153]

The site included entertainment and recreational features to combat the loneliness and boredom at the remote location. Facilities included a photo lab, indoor games, a softball diamond, a crafts shop and an archery range.[154] All the buildings on site were demolished in 1986.[155]

147 Ed Hansen and Roger Babler, "Cold War in Alaska: Nike Missile Sites," interview by Leslie McCartney and Karen Brewster, Project Jukebox, Digital Branch of the University of Alaska Fairbanks Oral History Program, September 3, 2014, https://jukebox.uaf.edu/site7/interviews/2464.

148 U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 267.

149 "For Sale – Government Surplus Property," *Fairbanks Daily News-Miner*, February 19, 1976.

150 U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 274.

151 Juliet Tango Sierra, *"Site Love,"* Nike-Hercules Alaska website, December 29, 2011, http://nikealaska.org/love/SiteLOVE.html.

152 "Eight Jobs," *Fairbanks Daily News-Miner*, September 14, 1959.

153 Juliet Tango Sierra, *"Site Love,"* Nike-Hercules Alaska website, December 29, 2011, http://nikealaska.org/love/SiteLOVE.html.

154 "Site Love Missile Base," *Fairbanks Daily News-Miner*, June 10, 1968.

155 Kristy Hollinger, *Nike Hercules Operations in Alaska: 1959-1979* (Fort Wainwright, AK: Conservation Branch, Directorate of Public Works, U.S. Army Garrison Alaska, 2004), 63.

*Pedro Dome, c. 1973.* *(Alaska Digital Archives)*

## Pedro Dome

The White Alice Communications System (WACS) was created as a more dependable network for the Aircraft Control & Warning (AC&W) system and the Distant Early Warning (DEW) Line system. The network needed to operate successfully from remote areas, across long distances, withstanding northern electrical interference and enduring extremely cold temperatures.[156] The contract to design such a network was awarded to AT&T, which recommended the use of a tropospheric scatter system incorporating microwave stations.[157] The system worked by sending radio signals into the troposphere and, although most of the signal vanished when it hit the troposphere, enough was present to reach the receiving station. The antennae passed the weak signals into a combiner, which would then select the most useful signals or combine several to produce a useable signal.[158] There were five types of standardized plans used for White Alice sites and they differed depending on the unique conditions and landscape of each site.[159]

Originally, 31 WACS stations were constructed – 22 tropospheric, six microwave, and three that were a combination of microwave and tropospheric. The Pedro Dome site was

*Road leading up to Pedro Dome, 2020.*

*Foundation of former building on Pedro Dome, 2020.*

*Pedro Dome site as it currently looks, 2020.*

[156] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 218.

[157] John Haile Cloe, *Top Cover for America: The Air Force in Alaska 1920-1983* (Missoula, Montana: Pictorial Histories Publishing Companies, 1984), 172.

[158] U.S. Army Corps of Engineers, Alaska District, *The White Alice Communications System*, April 2001, 6.

[159] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 219.

*Interior of permafrost tunnel, 2020.*

a combination station. At the peak of construction, there were approximately 3,500 workers on the 31 sites, and the system took three years to complete at a cost of $113 million. This amount greatly surpassed the original projected estimate, but was necessary for on-site equipment being installed in challenging terrain and operating in an extreme climate.[160] Pedro Dome was constructed using the most common WACS plan. Buildings were wood-frame construction, with a rectangular planned building used to house communications. Dormitories housed 16 people in ten bedrooms and included communal bathrooms, kitchens, dining areas, and laundry amenities.[161]

Although WACS was crucial to U.S. defense, the advanced technology proved to be obsolete before completion, when the Soviet Union launched the first satellite, Sputnik, in 1957.[162] WACS continued to grow until the early 1960s, with 49 tropospheric sites in total.[163] In 1983, the last of the WACS sites were sold to Alascom, ending an 80-year tradition of military-administered communications in Alaska. Their remote locations made reuse of the sites too expensive and nearly all – including Pedro Dome – were demolished by the mid-1980s.

[160] U.S. Army Corps of Engineers, Alaska District, *The White Alice Communications System*, April 2001, 7-8.

[161] U.S. Army Corps of Engineers, Alaska District, *The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, 218-220.

[162] U.S. Army Corps of Engineers, Alaska District, *The White Alice Communications System*, April 2001, 17.

[163] John Haile Cloe, *Top Cover for America: The Air Force in Alaska 1920-1983* (Missoula, Montana: Pictorial Histories Publishing Companies, 1984), 172.

[164] Sean Reid, "The Permafrost Tunnel: Alaska's Prehistoric Root Cellar," *Alaska Geographic*, Vol. 22, No. 1 (1995): 41

[165] Madeline Ostrander, "Tunnel Vision: Lessons in the Impermanence of Permafrost," Undark.org, April 28, 2020. https://undark.org/2020/04/28/fox-tunnel-permafrost-alaska-climate-change/.

[166] "Community Science Forum," *Fairbanks Daily News-Miner*, July 30, 1977.

*Entrance to permafrost tunnel, circa 1969.*

## Permafrost Tunnel

The U.S. Army Corps of Engineers began digging the permafrost tunnel in the 1960s. The site was chosen due to its location in an area where dredging occurred in the early twentieth century for placer mining operations. The tunnel, located 16 miles northeast of Fairbanks near Fox, was developed for the U.S. Army Corps of Engineer's Cold Regions Research and Engineering Laboratory (CRREL) in several stages for research purposes.[164] CRREL's permafrost tunnel is one of only two such subterranean facilities devoted to the study of permafrost that allows visitors inside. During the Cold War, interest in permafrost emerged and the Department of Defense sought to investigate its potential for military uses. The permafrost tunnel was designed as an experiment to test its potential for use as a military storage facility or bunker as scientists believed that the permafrost might be able to withstand bombing or shelling attacks, absorbing the shock.[165] The 360-foot-long tunnel bored through gravel, ice, soil, wood and bones spanning about 40,000 years.[166] The most recent section of tunnel was excavated between 2011 and 2018.

The research complex surrounding the tunnel – the Fairbanks Permafrost

Experiment Station (FPES) – tests state-of-the-art fabrication techniques designed for cold climates to inform construction and maintenance projects. Research includes altering environmental conditions to see the effects of permafrost and arctic climate on construction.[167] Today some of the research is aimed at extending the longevity of the tunnel, which has become more unstable in recent years. Chillers powered by solar panels will be tested in an effort to stabilize the tunnel's environment, and an expansion project to double the size of the tunnel is expected to be completed in winter 2021.[168]

## Second USO Club

Before the 1983 closing of the original USO Club building located on First Avenue, a replacement building was sought. The property on which the original building stood was being returned to the city as part of a revitalization project of the Fairbanks riverfront. As part of this agreement, the Fairbanks USO Council worked with the military and the Fairbanks Development Authority (FDA) to find a replacement property of equal or lesser value. In a letter addressed to the Army in 1982, the council outlined the minimum requirements for the new USO location, including parking space, bus service, a pool and game room, a lounge/ multipurpose room with a stage, a library, a conference room, dorm rooms, a thrift shop, public restrooms, two administrative offices, adequate storage and janitorial closets, and a reception/ information area. The letter noted that the current building was approximately 12,000 square feet.[169] Eventually the FDA and the military found a building suitable for the new USO at 507 Gaffney Road. It is unclear how long the building housed the USO, but in 1993, the City of Fairbanks deeded the building to the Bread Line, a local non-profit.[170]

*Second USO location, c.1980s.* *(UAF Archives. 2012-084-89)*


*Former second USO, now Stone Soup Café, 2020.*

[167] Army Corps of Engineers, "Permafrost Fact Sheet," Permafrost Experiment Station, November 19, 2012, https://www.erdc.usace.army.mil/DesktopModules/ArticleCS/Print.aspx?PortalId=55&ModuleId=23844&Article=476647.

[168] Madeline Ostrander, "Tunnel Vision: Lessons in the Impermanence of Permafrost," Undark.org, April 28, 2020. https://undark.org/2020/04/28/fox-tunnel-permafrost-alaska-climate-change/.

[169] Letter to Deputy Post Commander from Fairbanks USO Council, February 12, 1982, University of Alaska Fairbanks, Alaska Polar Regions Collections & Archives, United Service Organization (USO), Fairbanks, Alaska Collection, Acc. 2012-084, Folder 10, "Relocation."

[170] Warranty Deed, August 25, 1993, Fairbanks City Hall, Building Department, property file for 507 Gaffney.

# CONCLUSION

Alaska's strategic importance during World War II and the Cold War is undeniable. With the tremendous increase in military presence, Fairbanks saw a population boom and the community changed considerably. Once a sleepy little pioneer town, Fairbanks was transformed during these years into a modern city. During both wars, there was a massive housing and facility shortage due to the major influx of new residents. This resulted in the speedy development of the area and in improvements to the city. In addition, this resulted in the construction of many sites to accommodate both the changing defense needs and military community needs over the years.

When technology and defense needs changed, often sites that were no longer needed were just left in place instead of being removed or demolished. This practice has resulted in many historic military sites around the Fairbanks North Star Borough still standing, yet hiding in plain sight to most people unfamiliar with their significant connection to World War II or the Cold War. While some were abandoned, others were moved or repurposed for other needs, often for civilian use. Aside from the physical remnants of these sites, life in Fairbanks was changed dramatically for residents. By identifying, documenting, and researching these sites, the rich military history of the region can be shared and appreciated by both those already knowledgeable and those unfamiliar.

**There are many historic military sites around Fairbanks North Star Borough still standing, yet hiding in plain sight to most people unfamiliar with their significant connection to World War II or the Cold War.**

# ACKNOWLEDGMENTS

Text by Kirsten Freeman. This publication was made possible through the support of U.S. Army Garrison Alaska, the Center for Environmental Management of Military Lands and others, including: Elizabeth Cook, Julie Esdale, and Alexandra Wallace.

# BIBLIOGRAPHY

Blythe, Jeff. *Cold War Resources Inventory, United States Army Alaska: Fort Richardson, Fort Wainwright, Fort Greely*. CEMML TPS 00-15. Fort Collins, CO: Center for Environmental Management of Military Lands, 2000.

Chlupach, Robin Ann. *Airwaves over Alaska: The Story of Pioneer Broadcaster Augie Hiebert*. Issaquah, Washington: Sammamish Press, 1992.

Cloe, John Haile. "The Cold War Years: 1946-1991." Alaska Historical Society website. Accessed February 19, 2020. https://alaskahistoricalsociety.org/discover-alaska/glimpses-of-the-past/the-cold-war-years-1946-1999.

Cloe, John Haile. *Top Cover for America: The Air Force in Alaska 1920-1983*. Missoula, MT: Pictorial Histories Publishing Companies, 1984.

Cole, Dermot. *Fairbanks: A Gold Rush Town that Beat the Odds*. Kenmore, Washington: Epicenter Press, 1999.

Cole, Dermot. *Historic Fairbanks: An Illustrated History*. San Antonio, Texas: Historical Publishing Network, 2002.

Cole, Terrence. *Ghosts of the Gold Rush*. Fairbanks, AK: Tanana Yukon Historical Society, 1977.

Colette, Lola. Interview by Margaret van Cleave, February 3, 1994. Call number 94-13-10 pt. 1 side A, transcript, Series: Pioneer Tapes- igloo #4, Fairbanks, AK.

Cooley, Richard A. Fairbanks, Alaska: A Survey of Progress. Juneau, Alaska: Alaska Development Board, 1954.

Decker, Julie and Chris Chiei. *Quonset Hut: Metal Living for a Modern Age*. New York City, New York: Princeton Architectural Press, 2005.

Eberhardt, David. Interview by Kirsten Freeman. October 2019.

Eberhardt, Walter. Interview by Nancy Kuhn, Colleen Herning, Al George and Bruth George.

Ferber, Edna. *Ice Palace*. New York City, New York: Vintage Books, 2014. Project Jukebox Digital Branch of the University of Alaska Fairbanks Oral History Program, March 29, 2001, Oral History 2013-05-02, Pt. 1-2.

Historic American Buildings Survey. "USO Recreation Center." Library of Congress website, call number HABS, AK 6-FAIBA, 2. https://www.loc.gov/pictures/item/ak0214.sheet.00001a/.

Hollinger, Kristy. *Nike Hercules Operations in Alaska: 1959-1979*. Fort Wainwright, AK: US Army Garrison Alaska, Directorate of Public Works, Conservation Branch, 2004.

Hollinger, Kristy. *The Haines-Fairbanks Pipeline*. Fort Wainwright, AK: US Army Garrison Alaska, Directorate of Public Works, Conservation Branch, 2003.

McDonald, June. Interview by Margaret van Cleave, February 15, 1994. Call number 94-13-11, transcript, Series: Pioneer Tapes, Fairbanks, AK.

Naske, Claus M. and L. J. Rowinski. *Fairbanks: A Pictorial History*. Virginia Beach, Virginia: The Donning Company, 1995.

National Park Service. National Register of Historic Places registration form, Illinois Street Historic District. July 31, 2001.

Ostrander, Madeline. "Tunnel Vision: Lessons in the Impermanence of Permafrost." April 28, 2020. Undark website. https://undark.org/2020/04/28/fox-tunnel-permafrost-alaska-climate-change/.

Price, Kathy. Homesteads on Fort Wainwright, Alaska, ed. Glenda R. Lesondak. Fort Collins, CO: Colorado State University, 2002.

Price, Kathy. *The World War II Heritage of Ladd Field, Fairbanks, Alaska*. Edited by Glenda Lesondak. CEMML TPS 04-07. Fort Collins, CO, Colorado State University, 2004.

Price, Kathy. *Northern Defenders: Cold War Context of Ladd Air Force Base, Fairbanks, AK, 1947-1961*. CEMML TPS 01-02. Fort Collins, CO, Colorado State University, 2001.

Ray, Hez. *The Big Dipper: A Dream is Born*. Fairbanks, AK: publisher unknown, 2014.

Reid, Sean. "The Permafrost Tunnel: Alaska's Prehistoric Root Cellar." *Alaska Geographic*, 22, no. 1 (1995): 41.

Sierra, Juliet Tango. "Site Love," December 29, 2011. Nike-Hercules Alaska website. Accessed October 2020. http://nikealaska.org/love/SiteLOVE.html.

Tetra Tech Inc. *Final Inventory and Evaluation of Military Structures at Fort Greely, Delta Junction, Alaska* (Alaska: Army Corps of Engineers, April 1999).

United States Army, Alaska. *Cold War Resources Inventory: Fort Richardson, Fort Wainwright, Fort Greely*. Fort Collins, Colorado: Center for Ecological Management of Military Lands, Colorado State University, 2000.

United States Army Corps of Engineers. *Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999*, by D. Colt Denfield, Ph.D. Alaska District. 1994.

United States Army Corps of Engineers, Alaska District. *The White Alice Communications System*, April 2001.

Williams, Catherine. *Identification Guide to "Quonset" Arched Building Types*. Unedited draft. Northern Land Use Research, Inc., 2003.

# Cultural Resources Management at Fort Wainwright

The Cultural Resources Management Program supports the Army's mission by inventorying and managing cultural resources in a manner that complies with federal law, minimizes impacts on the mission, supports sustainability of resources and infrastructure, and provides sound stewardship of properties eligible for the National Register of Historic Places.

The Cultural Resources Management Office is located within the Environmental Division, Building 3023. Copies of publications and additional information on the history of USAG Alaska are available upon request. Business hours are Monday through Friday 7:30 a.m. to 4:30 p.m.

Directorate of Public Works, Environmental Division
ATTN: IMFW-PWE (Cultural Resources Manager)
1046 Marks Road, Fort Wainwright, Alaska 99703-4500
(907) 361-3002

Center for Environmental Management
MILITARY LANDS
COLORADO STATE UNIVERSITY

## February 2022