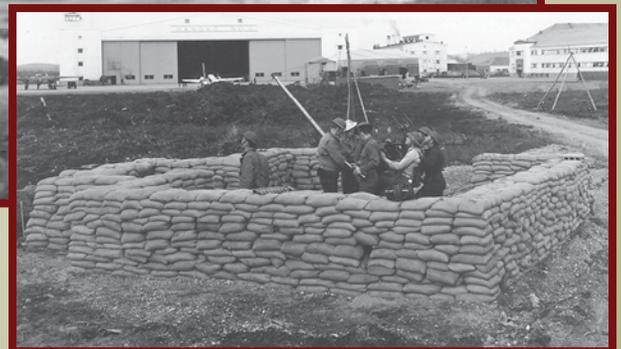
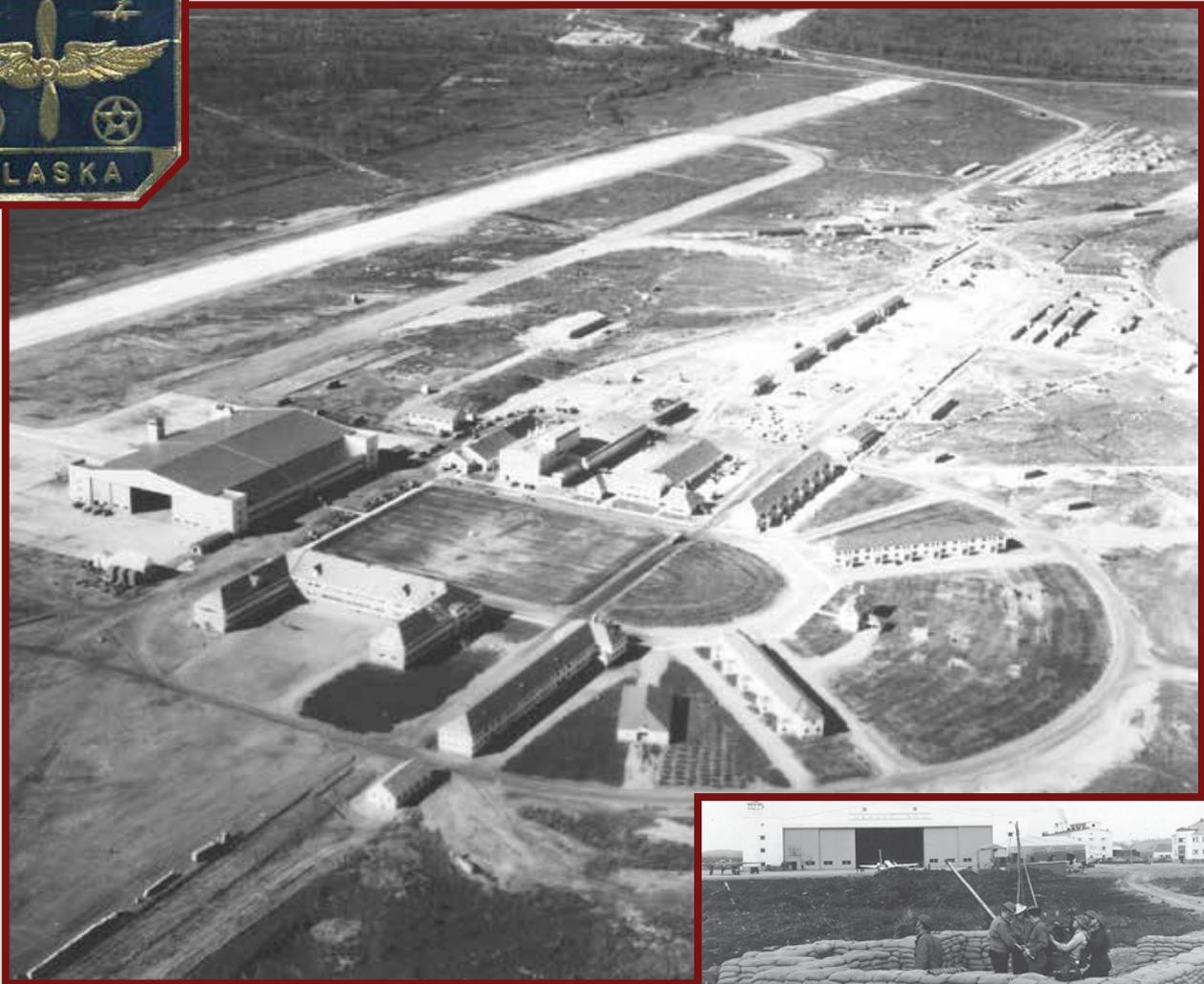


# U.S. ARMY GARRISON FORT WAINWRIGHT



**Guide to the Ladd Field  
National Historic Landmark  
and Ladd Air Force Base  
Cold War Historic District**



# Welcome to Fort Wainwright

## Entering the Installation

Fort Wainwright is an active military installation. All visitors are required to stop at the Visitor's Center located outside the Main Gate and acquire a visitor's pass. In order to receive a visitor's pass, one must show their driver's license, vehicle registration, and insurance paperwork. For those driving a rental car, the rental packet will serve as the required insurance and registration paperwork.

## How to Use This Driving Tour

Fort Wainwright is a large installation with over 40 historic properties encompassed within the Ladd Field National Historic Landmark and the Ladd Air Force Base Cold War Historic District. This tour is designed to be driven, but portions of it may also be walked; approved parking lots are marked on the map on pages 3 and 4.

### Driving Safety

Please obey all posted traffic laws and pay special attention to these regulations:

- ◆ Cell phone use is prohibited while driving.
- ◆ There is a 10 MPH speed limit when passing soldiers.
- ◆ Please be careful at intersections as they can be icy during much of the year.

### Weather

Fort Wainwright is located in Interior Alaska, and the weather varies dramatically throughout the year. Temperatures can vary from 90° F in the summer to -60° F in the winter with extended periods of darkness. During the spring and fall, the weather is more temperate, but conditions can change quickly. Please be sure to check the current weather conditions on Fort Wainwright before visiting and dress appropriately.

### Taking Photos

Fort Wainwright is an active military installation so photography is restricted to authorized personnel only. If you would like photos to commemorate your visit to Fort Wainwright, please stop by the Cultural Resources Management Office in Building 3023 (the last marked stop on this tour), for complimentary photos of the Post.

### Access

Due to current security measures, buildings are not accessible to the public.

# The History of Fort Wainwright

## Ladd Army Airfield – Cold Weather Testing Detachment



Fort Wainwright was established as the Ladd Field Cold Weather Test Detachment. Construction began in August 1939, just weeks before Germany invaded Poland, initiating World War II.

The location near Fairbanks was chosen because of its strategic position. As Brigadier General Billy Mitchell famously said, “I believe that in the future he who holds Alaska will hold the world.”

The original purpose of the Test Detachment was to ensure all Army planes and equipment could function at -60° F. If the United States was drawn into the war in Europe, it would need aircraft that could function in extreme cold. Ladd Field remained the primary cold weather testing facility for the military until Elgin Air Force Base in Florida constructed a climate-controlled hangar in 1947.

Hangar 1, circa 1941



## Construction of Ladd Field

The Test Detachment at Ladd Field was designed as a small, self-contained installation. The facilities envisioned for the installation were complex, multi-purpose structures that took several years to complete. The original workforce was drawn primarily from the local population of gold miners who were familiar with the challenges of building in the subarctic climate.

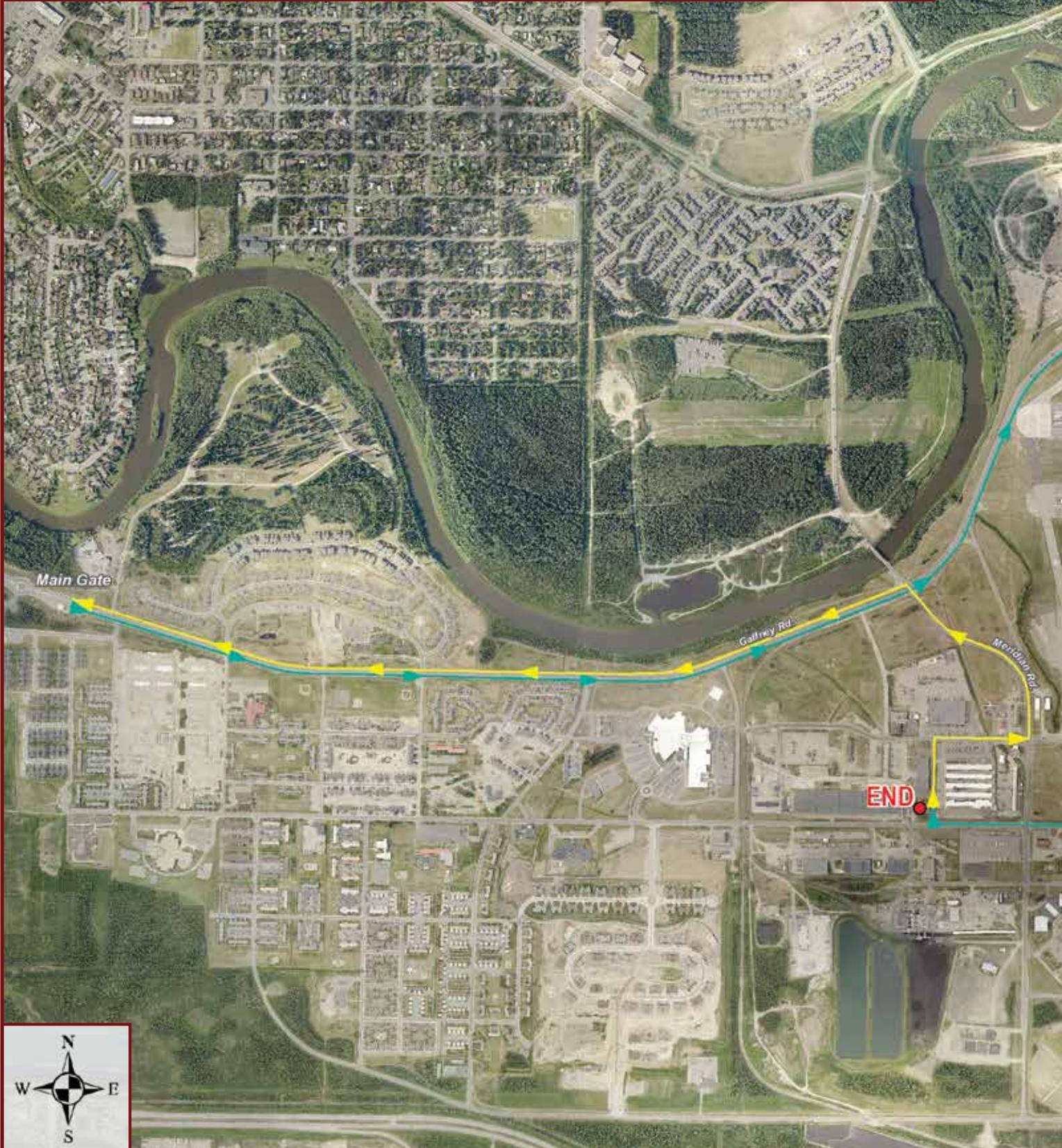


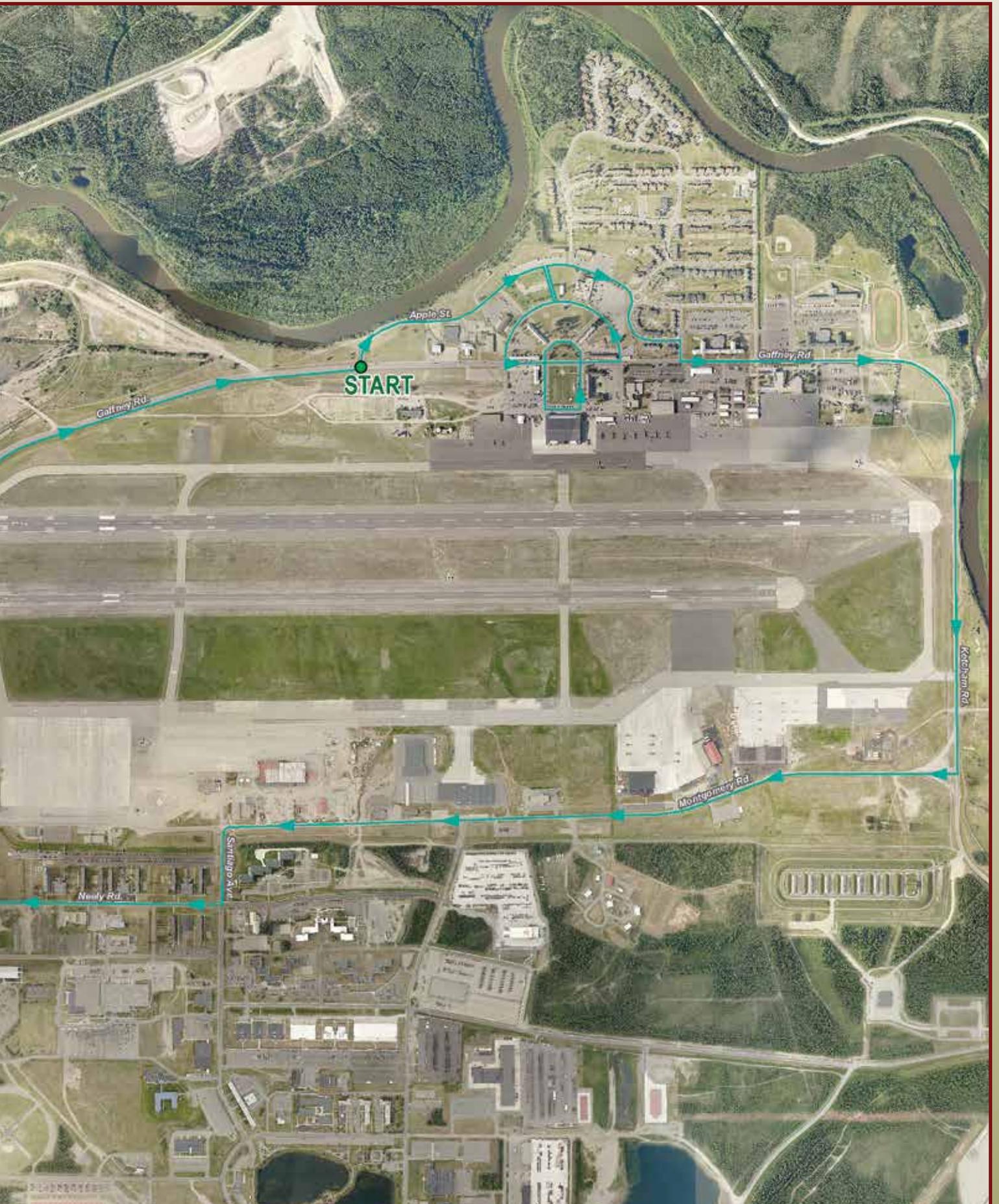
The construction of the installation was far from easy. With war looming, the construction continued year-round. The work continued until temperatures fell below -30° F. Brigadier General Bruce Staser worked on the construction of the installation and described his job as “chipping ice out of recesses in the basement wall of the hospital-to-be.” General Staser recalled that another worker at the installation, Arnold Holm, “would hold the rivet gun under one arm and hang onto the steel with the other, barehanded. He was one tough man.”

When the installation was dedicated in September 1940, the runway and the Commander’s Quarters were the only completed facilities. It was not until 1942 that all of the original facilities were completed. However, by that time, the war had necessitated the construction of another runway, six additional hangars, and numerous temporary structures across the installation.

# Tour Overview

This map provides an overview of all of the stops along the tour.





START

Gaffney Rd

Apple St

Gaffney Rd

Keesham Rd

Montgomery Rd

Neely Rd

Santiago Ave

# Starting the Tour



After passing through the Main Gate, proceed along Gaffney Road. To start the tour, turn left onto Apple Street and drive along the Chena River.

## Stop 1: Chena River

Ladd's siting is somewhat unusual in that it was built so close to an old, rapidly changing river. The Chena River is constantly changing shape through the opening and closing of new channels. This characteristic resulted in unstable ground on a number of occasions during construction. For instance, the northern runway, when it was first built, was laid out over an old slough bed. Ultimately this was unstable, and an eighty-square-foot section of runway collapsed, necessitating rapid reengineering that required an excavation down to fifteen feet below grade and new fill added before once again paving the surface.



Chena River, looking east, circa 1943

## Stop 2: Buildings 1049 and 1051

During World War II, several facilities were given over to the Russians for their sole use. Building 1049 was one of the buildings assigned to Russian personnel. It housed Russian enlisted soldiers and mechanics who worked to prepare the planes for the flight to Siberia. Building 1051 was also used for Lend-Lease Operations, but instead of Russians, it housed the American pilots who had ferried the planes to Ladd Field using the Northwest Staging Route.



Buildings 1049 and 1051,  
circa 1944

Proceed along Apple Street. Turn right onto the unnamed street and then at the stop sign, turn right onto Marks Road. You will be passing along the back sides of Buildings 1049 and 1051. At the stop sign turn left onto Gaffney Road. Building 1051 will be on your left.

## Stop 3: Building 1562 – Quartermaster’s Building



Building 1562, circa 1945

Like all of the nonresidential structures built for the original installation, Building 1562 served multiple functions. In addition to housing the Quartermaster’s offices and warehouse, Building 1562 also served as the fire station, finance office, freight office, commissary, laundry, signal office, guard station, and stockade.

Turn right onto Freeman Road. This is a one way street. Building 1562, the Quartermaster’s Building, is on your right. If you would like to get out and walk, parking is available around the perimeter of the parade ground in the designated spaces. In addition, there is a series of interpretive panels located at the south side of the parade ground that provide more detail into the history of Ladd Field.

Turn left onto Front Street. Building 1557, Hangar 1 is on the right.

## Stop 4: Building 1557 – Hangar 1

Hangar 1 is one of the most significant historic buildings on Fort Wainwright. It was designed to serve as the primary hangar and headquarters for the Cold Weather Test Detachment. It was the largest building on Ladd Field, and its six-story flight control tower is still the tallest structure on the installation. During World War II, Hangar 1 housed the headquarters and administration facilities, the weather office, the Test Detachment, and Russian mechanics working on Lend-Lease aircraft. The maintenance bay in Hangar 1 is divided by a set of internal hangar bay doors. Russian mechanics used the western half of the hangar bay while the Test Detachment operated out of the eastern portion.

### International Cooperation

One of the most interesting aspects of the Lend-Lease Operations at Ladd Field was the extent of cooperation between the Soviet Union and the United States. Russian planes always had priority for takeoff. There was a Russian speaking air traffic controller in the flight tower, and Russian personnel had access to the recreational facilities in Fairbanks in addition to the facilities on Ladd Field. Many visitors to the installation were surprised by the extent of the Russian presence. Captain Richard Neuberger who visited Ladd Field remembered being surprised after passing a sentry patrolling outside of the west half of Hangar 1.

“Suddenly I turned and looked at the sentry again. He was not an American soldier, as we had presumed. He was a soldier of the Red Army, and he was guarding a hangar where Soviet mechanics . . . were swarming over planes which soon would be winging across Siberia on their way to the battlefield in Europe.”



A soldier painting the Soviet red star on a plane in preparation for transfer

Hangar 1, October 2009



Lend-Lease planes on the apron of Hangar 1, circa 1944, including A-20s and P-39s



## The Cold Weather Test Detachment

During the first winter, testing was limited. The Test Detachment had only five planes, and one of the planes was damaged shortly after its arrival. Despite the difficulties, the Test Detachment accomplished its mission by identifying some of the major problems affecting arctic aviation and developing standard procedures for cold weather operations.

After two winters with limited resources, the Test Detachment started receiving all of the equipment and supplies it requested, including two of every plane in production. Representatives from many of the major manufacturers including Boeing, Pratt & Whitney, and General Electric came to Ladd Field to participate in the cold weather testing. Equipment developed by the Test Detachment included retractable skis for landing in snowy conditions, emergency ration packs for arctic environments, and improvements to aircraft design.



A B-24 that was used by the Test Detachment for experiments

Soviet pilots preparing for take-off

## World War II at Ladd Field

With the start of World War II, Ladd Field was tasked with new missions and underwent a dramatic transformation. While cold weather testing continued, wartime concerns took precedence and the Cold Weather Test Detachment became a tenant organization under the auspices of the Army's Air Transportation Command. Ladd Field served as the headquarters for Air Transport Command in the region, and all military supplies flown into the territory of Alaska passed through Ladd Field. As an air transport depot, Ladd Field served a support function for all missions in Alaska, including the Aleutian Islands Campaign.

The most significant of the new missions at Ladd Field, however, was the Lend-Lease Operations. As part of the war effort, the United States provided supplies and equipment to its allies, including Russia. Lend-Lease supplies to Russia were sent along several routes, but it was the air corridor through Alaska that proved to be the most secure; over half of the planes sent to Russia were sent along this route. The corridor was called the Northwest Staging Route, and it consisted of a series of airfields starting from Gore Field and Malmstrom Air Force Base in Great Falls, Montana, through Canada to Ladd Field, which was designated as the transfer point for the route. Overall, nearly 8,000 planes and several thousand tons of supplies were flown up the Northwest Staging Route and transferred to Russian pilots for the rest of the journey across Siberia to the frontlines of the war against Germany. At the height of the Lend-Lease Operations, there were 300 Russian personnel permanently stationed at Ladd Field in addition to the transient pilots.



The Lend-Lease Program is an example of extraordinary cooperation between wartime allies, and it was only with the cooperation of the American, Russian, and Canadian governments that the undertaking was a success.



From top to bottom:  
American, Canadian, and Soviet officers from the Lend-Lease Program; a Soldier unloading supplies; and the Cold Weather Test Detachment working on a P-51



Additional information on the World War II heritage of Fort Wainwright can be found in our publications. Please stop by the Cultural Resources Management Office for free copies of any of these publications.

Turn left onto Freeman Road. Building 1555 is on the right.

## Stop 5: Building 1555

Today, Building 1555 serves as garrison headquarters, but when it was originally constructed, it had a number of uses. The original installation hospital was located in the north wing, while the southern wing included a 250-man barracks that housed enlisted members of the Cold Weather Test Detachment and new arrivals to the installation. Building 1555 also served as the post exchange and theater.



Building 1555, circa 1945

Proceed up Freeman Road, and into the upper half of the parade ground. Buildings 1045 and 1047 are on the left.

## Stop 6: Buildings 1045 and 1047

Building 1045, called Murphy Hall, and Building 1047 were designed to serve as housing for officers and their families. The housing on the installation was of high standard, especially for the Alaskan territory. Phyllis Walseth, wife of the Post Adjutant, wrote to her family describing the facilities, “Nothing I can say can possibly tell you how nice they are for Alaska.” The apartments had hardwood floors, a living and dining room, a kitchen, three bedrooms, and two baths. The Walseths considered themselves very fortunate to have an apartment as there were only seven for the sixteen married officers. The other nine families had to find housing in Fairbanks.

The families did not get to enjoy the housing for long. After the start of World War II, all military dependents were required to return to the United States for safety reasons. During the war, the buildings were used to house officers, nurses, and visitors to the installation.



Building 1045, called Murphy Hall, 1942

## Utilidors

Beneath its streets the post has a unique feature, the utilidors. Utilidors (Utility Corridors) were one way the installation was designed to withstand the subarctic climate. The utilidors are underground tunnels that house the installation's utilities, protecting them from freezing during Alaska's long winters. The utilidors linked all the original buildings on post were later connected to the facilities built during the early Cold War. In order to avoid the extreme cold during the winter, personnel used the corridors as walkways. As one visitor jokingly put it, at Ladd Field, “you do everything underground, and don't come out except to fly.”

The utilidors are not open to the public.

Proceed around Freeman Road. Building 1048, the Commander's Quarters, is on the right.

## Stop 7: Building 1048 – The Commander's Quarters

Building 1048, also known as Quarters 1, originally served as housing for the commander of the Cold Weather Test Detachment, and today houses the Deputy Commanding Officer of US Army Alaska. It was one of the first facilities completed on the installation. It was in the Commander's Quarters that on December 7, 1941, local radio operator August (Augie) Hiebert woke up then Colonel Dale Gaffney, the Commander of the Cold Weather Test Detachment, with some interesting news. "I got him out of bed and I asked him, 'did you know there was a war on, Dale?' And he said 'no,' he said, 'you've got to be kidding.'"

Building 1048, just after completion in 1940



Continue around Freeman Road passing Buildings 1049 and 1051 again on your right. At the stop sign turn left onto Gaffney Road. Follow Gaffney Road for two blocks and turn left onto Marks Road. Building 1021 is on the corner on your right.

## Stop 8: Building 1021

With the start of World War II, Ladd Field became a very busy airfield. The installation was originally intended to house only a 500-man detachment, but by the end of the war, it was home to more than 5,000 American and Russian personnel. Many new facilities were constructed, including Building 1021, which was built to provide additional housing for officers and nurses.



Continue around Marks Road for two blocks. Building 1043, the Ladd Field Chapel, is located on the corner of Marks Road and the unnamed road.

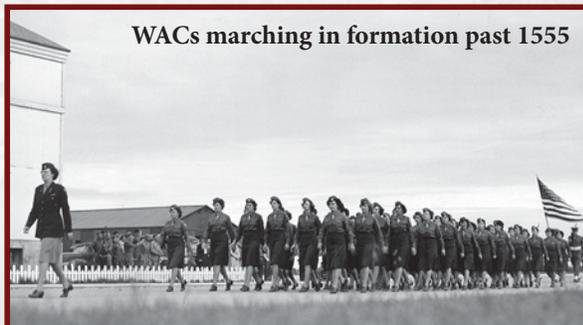
## Stop 9: Building 1043 – the Ladd Field Chapel

During the early years of Ladd Field, religious services were held in various buildings on the installation because there was no formally designated chapel. As the installation boomed in size from 520 people in 1941 to over 5,000 in 1945, a permanent facility was needed. The size and speed at which growth occurred throughout the armed forces necessitated the development of new standards for construction. While Ladd's original buildings took years to complete, the facilities built during World War II could be constructed in less than a week. In 1944, the Ladd Field Chapel was completed. Building 1043 is a standard design facility that was modified to serve as a chapel with the addition of a steeple. It is an example of the diverse forms that World War II era construction could take from Quonset huts to New England-style chapels.



Building 1043, circa 1949

## Women's Army Corps – WACs



WACs marching in formation past 1555

Women played an active and important role in World War II throughout the military. WACs at Ladd Field served in a diverse number of functions including radio operators, mechanics, nurses, air support, and base operations staff. The WACs arrived at Ladd Field in June 1944 and served through the end of the war. The WACs' barracks was located on the current site of the Last Frontier Community Activity Center.

Turn left onto the unnamed road. At the stop sign turn right onto Apple Street. Continue along Apple Street for approximately two blocks. Building 1024, the MARS Building, is located on the left. There is an interpretive panel available for viewing here.

## Stop 10: Building 1024 – the MARS Building



Building 1024 surrounded by radio antennas, circa 1944

Communication is vital during any war, but at the start of World War II, Alaska's military installations were only loosely connected by an incomplete communications system. After Pearl Harbor, communications became increasingly vital and new facilities were constructed to house the more technologically-advanced equipment. Building 1024 served as the radio transmitter building during World War II. It was located in an open field surrounded on all sides by radio antennas. Today, the building is known as the MARS Building after the Military Auxiliary Radio System (MARS), which operated out of the building during the Cold War.

## The Cold War in Alaska

Hangar 1

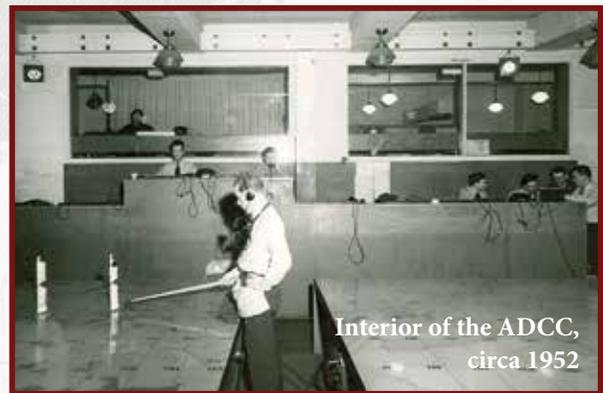


Alaska's proximity to both Russia and the polar navigation routes to Europe and the Middle East made it and its military installations exceptionally strategic. American and Russian military planners developed what has been called the "Polar Concept," which envisioned the Arctic as the next frontline for a military engagement. As U.S. Air Force General Carl Spatz instructed his commanders, "the development of the Arctic front is our primary operational objective."

Over the course of the Cold War, Alaska would serve many roles as the U.S. prepared for a potential conflict with Russia and its allies. Alaska was used as a laboratory for experiments on all aspects of life in the Arctic. It served as the frontline of defense, a store house, and a listening post.

As one journalist would describe it, Alaska was "our northernmost sentry . . . [the] guardian of our continent." In some ways it is ironic that Ladd Field, where only months before the Americans and the Russians had been working side-by-side, would serve as the headquarters for the units flying some of the first missions of the Cold War. Ladd Field was renamed Ladd Air Force Base after the creation of the Air Force in 1947 and served as the Alaska Air Command Headquarters for all the territory north of the Alaska Range. Its

mission was to identify, locate, and destroy any enemy fighters within American territory. The Air Defense Control Center (ADCC), located on Ladd Air Force Base, coordinated all defense operations and training exercises in the region. The ADCC was described as the "nerve center for north of the



Interior of the ADCC,  
circa 1952

range defense." It oversaw operations at subsector centers like Murphy Dome and coordinated battle efforts with Elmendorf Air Force Base near Anchorage.

Ladd Air Force Base would host reconnaissance units, fighter intercept squadrons, arctic training exercises, and the Arctic Aeromedical Laboratory.



Dog team in front of F-102 and Kodiak T hangar, circa 1956



Continue along Apple Street, go around the roundabout and turn right onto Beechnut Street. Follow Beechnut Street through the residential neighborhood until you come to a stop sign. Turn right onto 102nd Street. At the stop sign turn left onto Gaffney Road. Follow Gaffney Road as it curves around the airfield (and turns into Ketchum Road) and turns south. Once past the south runway, turn right onto Montgomery Road. Building 2077, Hangars 7 and 8 are on the right.

## Stop 11: Building 2077 – Hangar 7 and 8

In the 1950s, the Air Force began a major construction campaign to build permanent facilities to replace the temporary facilities left from World War II. One of the new facilities constructed was a Combat Alert Cell (CAC). CACs were self-contained facilities for fighter intercept squadrons and were generally built at the more remote Forward Operating Bases. CACs included all the maintenance, housing, and billeting facilities within one structure called a ready hangar, as the squadrons stationed there were to be ready to respond at a moment's notice. On Ladd Air Force Base, the CAC was expanded to include the ready hangar, two conjoined hangars, additional training facilities, and an ammunition storage complex. Today, Hangar 7 and 8, the ammunition storage point, and several of the support facilities remain. The ready hangar was moved to Eielson Air Force Base after Ladd Air Force Base was transferred back to the Army in 1961.

Hangar 7 and 8 with the original Hangar 6 in the background, circa 1961



Proceed down Montgomery Road. Building 2088, the modern Hangar 6, is on the right.

## Stop 12: Building 2088 – the Modern Hangar 6

Today's Hangar 6 stands on the site of the original Hangar 6. Originally four Birchwood hangars were constructed on Ladd Field. Hangar 6 served an important role in the early missions of the Cold War and housed the 46th/72nd Reconnaissance Squadron from 1946-1949. Sadly, Hangar 6 was lost to fire in 2004. Today, the modern Hangar 6 houses one of the Army's aviation units.



Proceed down Montgomery Road, traveling straight through the roundabout and continuing down Montgomery Road. At the stop light, turn left onto Santiago Avenue. After one block, turn right onto Neely Road. Continue down Neely Road, go through the stop light, and in one block turn right onto Engineer Place. Building 3023, the DPW Environmental Division, is on the corner on the left. You may park in front of the building or in the lot next to the building. This is the last stop on the tour.



## U.S. Army Garrison Fort Wainwright – 1961 to present



On January 1, 1961, Ladd Air Force Base was transferred back to the Army and rededicated as Fort Jonathan M. Wainwright. The Army provided support to the Air Force throughout the Cold War and continued the tradition of cold weather training and experimentation that is the installation's foundation. While changes in military strategy and deployment during the late 1960s and 1970s would greatly decrease the installation's population, Fort Wainwright continued to provide ground defense for the Interior. In 1986, Fort Wainwright was given a new mission to support world-wide deployment. Once again, Fort Wainwright's strategic location on the polar navigation routes allows for the rapid deployment of soldiers throughout the world.

## Stop 13: Building 3023 – DPW Environmental Building

U.S. Army Garrison Fort Wainwright was founded in the summer of 1939, just weeks prior to the start of World War II. It has remained an active military installation ever since. The Ladd Field National Historic Landmark was added to the National Register of Historic Places in 1984, and the Ladd Air Force Base Cold War Historic District was determined eligible for the National Register in 2001.

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 our publications, additional information on the history of Fort Wainwright, and historic photos of the installation are available upon request. Business hours are Monday through Friday 7:30 a.m.-4:30 p.m.

### Available Publications:

- ◆ *Early Mining History, Fort Wainwright and Fort Greely, Alaska* – 2001
- ◆ *Northern Defenders: Cold War Context of Ladd Air Force Base, Fairbanks, Alaska* – 2001
- ◆ *Early Transportation Routes, Fort Wainwright, Alaska* – 2002
- ◆ *Homesteads on Fort Wainwright, Alaska* – 2002
- ◆ *The Haines-Fairbanks Pipeline* – 2003
- ◆ *Nike Hercules Operations in Alaska: 1959-1979* – 2004
- ◆ *The World War II Heritage of Ladd Field, Fairbanks, Alaska* – 2004
- ◆ *Tracking the Unthinkable: The Donnelly Flats Midas Ground Station and the Early Development of Space Warning Systems, 1959-1967* – 2006
- ◆ *Cold Missions: The U.S. Army Air Forces and Ladd Field in World War II* – 2009
- ◆ *Cold Weather Testing in Alaska: 1940-1970* – 2012



Copies of our publications can also be downloaded from our website:  
<http://www.wainwright.army.mil/env>

## U.S. Army Garrison Fort Wainwright

Directorate of Public Works  
Environmental Division  
Cultural Resources Section

North Post or “The Horseshoe” is the heart of the Ladd Field National Historic Landmark. Originally designed as a small, self-sufficient unit, the buildings surrounding the Horseshoe are all original to the 1939 plan and remain in active use.



1944, Photograph courtesy of USAF



2011, Photograph courtesy of USAG FWA

Correspondence to:  
Directorate of Public Works  
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1060 Gaffney Rd. #4500  
Fort Wainwright, AK 99703-4500

For more information on Fort Wainwright’s history, call (907) 361-3002  
or view the website at <http://www.wainwright.army.mil/env>