Fort Cronkhite History Walk
A World War II Army Post That Helped Defend San Francisco

Fort Cronkhite soldiers stand at ease.
(Photo circa 1941)
Welcome to Fort Cronkhite! This former military post, which was established during WWII and used through the Cold War, stands at the edge of the Pacific Ocean and was part of San Francisco’s first line of defense against enemy attack. In the early 1940s, the U.S. Army constructed hundreds of similar wood-frame, military posts across the country. Now, nearly 70 years later, very few unaltered examples of this type of military architecture still exist. This self-guiding brochure takes you on a walking tour of Fort Cronkhite, providing you with historic information about how the men at this post lived during the war. While a specific walking route is suggested, please feel free to wander, exploring what interests you most.

Be Advised
If you are in a wheelchair, or need to minimize walking, you can still enjoy the tour by going down Edison Street, where halfway down on the south side between Buildings 1057 and 1058 there is an accessible concrete pad that offers an overlook onto Building 1049 and Rodeo Beach. Non-profit groups, our “park partners,” occupy most of the Fort Cronkhite buildings and visits to the buildings’ interiors are not allowed. Please be respectful during your visit as people are conducting business.

Questions? Please stop by the Marin Headlands Visitor Center, in the historic chapel building at the intersection of Bunker and Field roads. The visitor center is open daily from 9:30 AM to 4:30 PM, or phone (415) 331-1540. Please visit Marin Headlands at: www.nps.gov/goga/marin-headlands.htm

All images courtesy of Golden Gate National Recreation Area, Park Archives and Record Center, unless otherwise noted.

Below: Fort Cronkhite soldiers conduct military training in the area that is now the paved parking lot. (1941)

Cover photo: Fort Cronkhite right after completion. (Photo circa 1941)
Fort Cronkhite cantonment nestled into the Marin Headlands and Battery Townsley perched above. If enemy attack came from the Pacific, troops from Fort Cronkhite would man Battery Townsley and other harbor defense installations dotting the beaches and hills. (Photo circa 1965)

Start the tour at the west end of the parking lot, near the information kiosk. Look towards the buildings just across the parking lot.

1 Harbor Defenses of San Francisco Bay

San Francisco Bay, with its sheltered harbor, rich natural resources, and single mile wide entrance, has long been recognized as an ideal location for military defense. The Spanish established the Presidio of San Francisco in 1776 to protect their interests in the bay. During the 1850s and 1860s, the United States Army identified harbor defense as one of the principle means for protecting the seacoast, and therefore the country. After the Gold Rush, the United States Army constructed harbor defense forts at Alcatraz, Fort Point, Angel Island and Fort Mason.

Beginning in the 1890s, in order to use the most modern military technology, the War Department began upgrading the nation’s seacoast forts by constructing new concrete gun batteries and mounting state-of-the-art artillery pieces. This modernization program led to the construction of modern fortifications in the Marin hills overlooking the Golden Gate. Between 1895 and 1905, ten massive Coast Artillery batteries were constructed and the army designated the lands as Forts Baker and Barry. But by the 1920s, as a result of wartime technological advances, the existing harbor defenses had become obsolete. Recognizing its inadequacies, the army declared that permanent seacoast fortifications should be considered essential. The army’s primary coast defense weapon, the massive 16-inch rifle, would become the standard harbor defense weapon against enemy ships. Mounted on a high-elevation barbette carriage, these artillery pieces could fire one-ton projectiles more than 25 miles out into the sea.

During the 1930s, diplomatic relations between the United States and Japan eroded. The establishment of Fort Cronkhite, poised at the edge of the Pacific Ocean, was a direct result of the army’s perception of a need to protect the west coast from possible Japanese attack. The Harbor Defenses of San Francisco (HDSF) was assembled and headquartered at Fort Scott on the Presidio. With its area of responsibility stretching 60 miles from Point Reyes in the north to Half Moon Bay in the south, the HDSF was charged with protecting the coastline from naval attack, supporting land defenses against beach assault, and ensuring the safety of friendly ships entering and leaving San Francisco Bay. In 1937, the army purchased 800 acres of private land with the intent to build Fort Cronkhite. It was the last harbor defense post under the jurisdiction of the HDSF. Military posts under the command of the HDSF included Fort Scott, Fort Miley and Fort Funston in San Francisco, and Fort Baker, Fort Barry and Fort Cronkhite in the Marin Headlands.

In 1939, as war raged across Europe, President Franklin D. Roosevelt proclaimed a limited national emergency, launching America into a massive pre-war mobilization effort. Almost overnight, factories were constructed to turn raw materials into ships and armaments and new military posts were established to house and train the rapidly arriving soldiers. Much of this mobilization effort took place in the Bay Area. In addition to the existing Bay Area military bases, new facilities were constructed that included the Sausalito and Richmond shipyards, the Treasure Island Naval Air Station, and the Oakland Army Base Terminal. Existing military installations were expanded at Mare Island Naval Shipyard, Hamilton Army Air Field, the Benicia Arsenal, and the San Francisco Port of Embarkation. The harbor defense fortifications at the Golden Gate were also expanded, upgraded, and in some cases, re-armed.

Now walk a short ways north of the rest-rooms, turn your back to the ocean and face toward the hills. Hidden about half way up on Wolf Ridge is one of the Army’s most powerful World War II weapons: Battery Townsley. The walk up to the battery is strenuous and is not included in this walking tour (contact the Marin Headlands Visitor Center for open hours). Feel free to visit it at your leisure; follow the Coastal Trail, west from the Fort Cronkhite parking lot, and allow at least 45 minutes.

Fort Cronkhite was named for the recently deceased Major General Adelbert Cronkhite, a West Point graduate who commanded the 80th Division in France during World War I.
The Power of Battery Townsley

Battery Townsley was a casemated battery that mounted two 16-inch caliber guns, each capable of shooting a 2,100 pound, armor-piercing projectile 25 miles out to sea. The guns and their associated ammunition magazines, power rooms, and crew quarters were covered by dozens of feet of concrete and earth to protect them from air and naval attack. This battery, named in honor of Major General Clarence P. Townsley, a general officer in World War I and a commandant at West Point Military Academy, was considered the zenith of military technology and was the result of careful, long-term planning. As early as 1915, the army was eager to construct the 16-inch gun batteries at San Francisco, and by 1928, the decision had been made to install two batteries near the city, one on either side of the Golden Gate straits. In 1938, the army began construction of Battery Townsley in the Marin Headlands.

Battery Townsley was a high security operation; civilians living in San Francisco knew that there were batteries nearby but their exact locations were not revealed. A battery of this design had never been actually fired before, so the soldiers underwent several months of practice before firing the guns for the first time. The men were subjected to endless training, often under difficult situations: in the rain, in the pitch dark with all the electricity shut off, or with their commanding officer blocking the traditional route to the battery. The practice of dealing with any contingency ensured that the soldiers could operate their guns at a moment’s notice, under any condition, if ever under enemy attack.

By summer of 1940, Battery Townsley was ready for testing with live ammunition. The army estimated that the projectile’s farthest range, which was about 25 miles, would just reach the Farallon Islands. Waiting for a non-foggy day in July took some patience, but finally, the fog cleared and the test shot was fired. As the whole mountain shook with the power of this huge cannon, the projectile went past the Farallon Islands, even farther than anticipated. Battery Townsley, together with Battery Davis at Fort Funston (located south of the Golden Gate, near the San Francisco Zoo), became the prototypes for the army’s future coastal defenses; the army planned to construct at least 25 additional 16-inch gun batteries along both the nation’s eastern and western seaboards.

Disarmed and neglected for many years, Battery Townsley has now been partially restored. The battery’s labyrinthine corridors and magazines are now open once a month to the public. For open hours and more information contact the Marin Headlands Visitor Center.
3 Construction of the World War II Buildings

You are walking through a former World War II military post, where simple wood-frame buildings tell a fascinating story of American ingenuity and the nation’s ability to create and produce quickly, under pressure. In the fall of 1939, two years before our nation officially entered the war, the U.S. Army consisted of only 200,000 enlisted soldiers and there was little need for new or updated housing. Beginning in 1940, the military started drafting men into the army and navy; military ranks began to swell as hundreds of thousands of draftees, all of whom had to be housed, entered the service. Within just five years, the army had risen to the challenge and built temporary military housing for all of its soldiers—a total of approximately 6 million men by 1944!

During World War II, providing adequate temporary housing for these new soldiers became a nationwide concern, because temporary barracks for service men were rarely satisfactory. Military field housing during World War I had been notoriously bad: soldiers often lived in tents, frequently in harsh environments, without proper heating and sanitary facilities. By the late 1930s, Americans demanded a higher quality of life for their soldiers; as a result, the army was expected to provide better housing for the draftees. The Selective Service Act, passed in September 1940, specifically stipulated that no soldiers would be sworn into service until the government made adequate provisions for their shelter.

The military realities of World War II were vastly different than those of the “Great War.” During World War I, American soldiers were transported to France, where they were housed and trained at European posts close to the battlefields. But by 1940, Germany had occupied most of Europe, leaving Great Britain as the only country available to host American troops. Because England only had limited space to house, maintain and train American soldiers, transporting partially-trained American soldiers overseas was no longer an available option. For the first time, the War Department needed to accommodate a substantial standing army that would be stationed in the United States indefinitely. As a result of men enlisting or being drafted, the army swelled to 400,000 by November 1940 and by February 1941, another 700,000 had joined them. The army needed immediate plans for accommodating all these incoming men.

“I can give assurance to the mothers and fathers of America that each and every one of their boys in training will be well housed.”

—President Franklin Roosevelt, 1940

Above: Construction of a one-story recreation building at Fort Cronkhite. The World War II “standard mobilization building plans” contained designs for over 300 structures, including office buildings, warehouses, garages, libraries, chapels, fire stations and housing—essentially, any building type the army might need for the war effort. (Photo 1941)
The army’s two construction divisions, the Quartermaster Department and the Corps of Engineers, were immediately given the job of providing housing, quickly and cheaply. They established five principles to guide mobilization construction plans: speed, simplicity, conservation of materials, flexibility and safety. Using these principles, the construction divisions were directed to draw up standard building plans for simple wood-frame structures. The buildings were made with inexpensive and prefabricated materials and could be constructed in assembly-line fashion. The standard plans were bundled into construction packages that could meet the needs of a 125-man company, complete with barracks, mess halls, and recreation and supply buildings.

These structures, which now included central heating, interior showers and latrines, and other modern conveniences, were recognized as being far superior to the World War I tents.

Construction took place at break-neck speed as a result of readily available labor resources and ingenuity with building materials. Construction crews at Fort Ord in Monterey, California, boasted that they could finish a building every 54 minutes. By June 1941, the army had built housing for 1.2 million men. By June 1942, they were able to accommodate 2.4 million men and by January 1943, 4.6 million men were housed within these types of wood-frame buildings.

Continue down Edison Street until you reach the corner of Hagget Street. Look towards Building 1059 to your right. The army assigned “T”的 to buildings that were considered temporary.

4 Life in an Army Barracks

In front of you is Barracks Building 1059, one of the most commonly found World War II building types. It was designed to accommodate up to 63 men in single bunks, or 126 men in bunk beds. So that the army could fit as many men into one building as possible, the barracks’ interior arrangement ensured economy of space, with windows that could be opened for adequate ventilation on opposing sides of the room.

Uniformity and discipline went hand-in-hand in the army. All the soldiers had to maintain their bunks, their lockers, and their clothes in precisely the same manner. One soldier was designated as the ‘barracks orderly’ whose duties included inspecting the barracks everyday to ensure compliance with regulation, maintaining a fire watch, and preventing theft.

From Building 1059, follow the concrete path at the north side of the building that leads down to Building 1049 below you (see map). Be careful of the uneven steps and overgrown pathways and avoid walking along Mitchell Street. If you cannot negotiate the path or hills, you can read the remaining four stops from this location.

Above: The interior of a typical World War II barracks consisted of two large open rooms with folding cots that alternated head-to-toe for health purposes. Uniforms were hung either on brackets on the wall or stored in standing lockers. (Photo circa 1942, National Archives, Record Group 111)
Right: The soldier’s locker, used to store all personal items, stood at the end of each bunk (thus its name “footlocker.”) Standard-issue items included extra clothes, razor and razor blades, shaving brush, toothbrush, soap, socks, stationery, and cigarettes. Note the polished shoes, aligned neatly underneath the cot. (Photo circa 1941; Ft. Lewis Military Museum, Ft. Lewis, WA)

Left: Barracks inspections were a daily part of army life. Here, a soldier stands at attention next to his equipment, including a gas mask (right), and eating utensils (left). (Photo July 1941; National Archives, Record Group 111)

5 A Soldier’s Life at Fort Cronkhite

Building 1049 was one of Fort Cronkhite’s several mess halls where soldiers ate three meals a day. One cook was assigned to each grouping of three barracks and soldiers on KP (Kitchen Patrol) duty helped prepare the food. Army food was usually cheaply prepared and of inconsistent quality, but special menus were created for holidays. The 1941 Christmas Dinner menu for the Harbor Defenses of San Francisco included roast turkey with oyster dressing, candied sweet potatoes, spinach with hard-boiled eggs, mince and pumpkin pies, mixed nuts, coffee with fresh milk and cream (a refreshing break from powdered milk), and cigars and cigarettes for all.

The first soldiers stationed at Fort Cronkhite were assigned to the 6th and 56th Coast Artillery Regiments. A soldier's life at Fort Cronkhite, as anywhere in the army, meant that you did what you were told to do. A soldier’s daily life on post was structured and regimented; they were required to drill and train, eat and clean their barracks, all at tightly scheduled times. The soldiers trained constantly, either up at Battery Townsley or on the post’s main parade ground, which was located in the large open space that is now a parking lot. Fort Cronkhite, like most World War II posts, provided the men with the bare necessities for military life. In addition to providing food and housing, the army also provided medical and dental care to the soldiers; there was even an on-post barber.

While off-duty, the men relaxed in the recreation building (called “day rooms”), where the army provided ping-pong tables, pool tables and popular reading material. The newly-constructed chapel at Fort Barry provided multi-denominational services and the chaplain sponsored dances and stage shows for the men. To maintain morale among the troops and provide much-needed breaks from foggy Fort Cronkhite, the army awarded leave passes to soldiers who eagerly traveled to Sausalito or took buses into soldier-friendly San Francisco.

One troop of African-Americans, labeled by the army as the 54th Coast Artillery Regiment (colored) were briefly assigned to Fort Cronkhite. African-American soldiers during World War II had a very different military experience than their white soldier counterparts. The U.S. Army’s official policy of segregation reflected American society at that time. African-American soldiers were organized into all-black units, frequently commanded by inexperienced white officers. Based on the army’s assumption that black and white soldiers could not achieve the camaraderie required to fight successfully alongside each other, black soldiers were initially not allowed into combat. Most African-American troops were assigned to service and support roles and only later in the war were they allowed into battle. They were also not offered the same military and technical training as the white soldiers. On post, black soldiers were not allowed into the same army facilities as the white soldiers and were frequently relegated to inferior
During and after World War II, civil rights groups worked tirelessly to balance the army’s racial inequalities and injustices. In 1948, President Truman signed Executive Order 9981 which ensured that “there shall be equality of treatment and opportunity for all persons in the armed services without regard to race, color, religion or national origin.”

Right: As per regulations, each mess hall was equipped with standard-issue dishes, cutlery, and stemware. The kitchen was fully equipped with ovens, stoves and refrigerators, and often boasted equipment such as cereal cookers, ice cream freezers, coffee pots, and dishwashers. (Photo circa 1942; National Archives, Record Group 111)

Above: This photo shows the 54th Coast Artillery Regiment, stationed at Fort Cronkhite. (Photo circa 1942)

housing located at the edge of the army post. During and after World War II, civil rights groups worked tirelessly to balance the army’s racial inequalities and injustices. In 1948, President Truman signed Executive Order 9981 which ensured that “there shall be equality of treatment and opportunity for all persons in the armed services without regard to race, color, religion or national origin.”

Please retrace your steps back towards the east side of Building 1049 and stand near the flagpole, facing Building 1045. The cluster of buildings in front of you functioned historically as the post’s town center. Building 1045 was built in 1942 and served as the fire station. Building 1046 was the post exchange, which operated like a small general store where soldiers purchased food, cigarettes and magazines. Building 1033, located up the hill, was the post headquarters, where the commanding officer had his offices. Now turn towards the ocean and scan the skies. Imagine what it would feel like to be stationed at Fort Cronkhite and anticipating an enemy attack at any time.
San Francisco on High Alert!

On Sunday morning, December 7, 1941, Japan attacked the U.S. Navy bases at Pearl Harbor, Hawaii. Fearing that the next attack could be on San Francisco, the HDSF immediately issued a command to “man all guns”. The men at Fort Cronkhite immediately fell into formation and reported to their duty stations at Battery Townsley and the beach defenses. Because it was December, thousands of soldiers had already been granted travel leave. By that Sunday afternoon, the army announced in newspapers and on the radio that all leave and furloughs had been cancelled. Across the country, coast artillery soldiers on holiday immediately returned to their post.

The Harbor Defenses of San Francisco were put on “A” alert, which required the guns to be operational and able to open fire at a moment’s warning. Literally overnight, the soldiers’ lives went from one of daily tedious training to real military action requiring all their focus and skill. At Fort Cronkhite, the soldiers manned Battery Townsley in 24-hour shifts.

During training, because the Fort Cronkhite cantonment was a 15-minute walk away, soldiers manning Battery Townsley had slept in pup tents set up on the nearby hill. After the attack on Pearl Harbor, the army became acutely aware of the need for fast response. To facilitate getting the battery into action as quickly as possible, the commanding officer installed bunks for more than 150 men in the battery’s halls and galleries. The soldiers also dug a series of underground rooms along Wolf Ridge, adjacent to a trio of antiaircraft guns overlooking the battery. These underground quarters provided space for the men to eat and sleep, as well as for ammunition storage. The winter of 1941–1942 tested the mettle of these troops. Not only did they live with the fear of enemy attack and imminent action, they also had to live and function in the harsh environment on windswept Wolf Ridge.

The army also built concrete and steel lookout posts, technically called “fire-control stations” because they helped direct the batteries’ gun fire. The Fort Cronkhite soldiers manned these fire-control stations that were half buried in the hillsides along the coastline. Each man took a four hour shift, straining his eyes at the dark Pacific Ocean through special high-powered telescopes. If they detected enemy ships, they would phone in the coordinates to their counterparts working the big guns.

Below: A Fort Cronkhite soldier in position, operating an antiaircraft machine gun.

(Photo circa 1941)

Above: Operating a 16-inch battery required a crew of more than a hundred men. This photo shows several Coast Artillery soldiers loading the 2,100-pound projectile into the breech of the huge gun.

(Photo circa 1941; San Francisco History Center, San Francisco Public Library.)
These cold, wet, and unlit observation stations had no latrines or heat; strict compliance with the black-out order required complete darkness all night long. Every few days, the soldiers stationed back at Fort Cronkhite would truck food and provisions up the hill to replenish the men stationed in the observation stations. In the event of an emergency night time delivery, some unfortunate soldiers were assigned the dangerous task of driving up Mt. Tamalpais during the black-out, which meant navigating the trucks on steep, curvy roads in the pitch dark without headlights.

Living with the constant fear of enemy attack made for a very tense winter for everyone in the Bay Area. Almost overnight, the city of San Francisco was thrown into wartime life. All the nearby cities were forced to observe the night-time blackouts. Soldiers and sailors flooded the city on their way to and from various posts. Army guards were posted on the Golden Gate Bridge to guarantee its safety. Security at the military posts was strictly enforced; guards were given "shoot-to-kill" orders for anyone who did not stop and provide the correct password.

Once on high alert, Fort Cronkhite soldiers manned their guns around the clock. This photo shows the men’s sleeping arrangements on Wolf Ridge, in a temporary corrugated metal shed, similar to a Quonset hut, built into the side of the hill. (Photo 1942)

Opposite page, left: To prepare for possible hand-to-hand combat, Fort Cronkhite soldiers were outfitted with bayonets. (Photo circa 1942)

Opposite page, right: Fort Cronkhite Sergeant Carroll Lundeen, is shown here training with portable communications. (Photo circa 1941-1942)
If you are not comfortable walking uphill, you do not need to follow Hagget Street up to stops 7 & 8. You can read the text for stops 7 & 8 and then retrace your steps back along Edison Street and finish in the parking lot. Otherwise, you can continue up Hagget Street to the top of the hill and take a left onto Kirkpatrick Street. On the corner you will see Building 1044, the post’s guardhouse where disorderly soldiers were temporarily detained.

7 War Time Routine at Fort Cronkhite

By the fall of 1942, fears of an immediate attack had faded. The alert warning for the coastal defenses was downgraded to a level “B,” which allowed men to sleep in their barracks as long as they could reach their batteries in 15 minutes. Harbor Defenses settled into a wartime routine. This new relaxation of regulations allowed the men at Fort Cronkhite to crawl out of their cold, underground homes and once again enjoy the comfort of the centrally heated, wood-frame barracks. To make their lives somewhat more comfortable, the men who were still stationed at the bunkers and batteries were often visited by USO entertainers or by mobile canteens that sold magazines, newspapers, candy, and toiletries.

By the end of 1942, the tide of the war with Japan was beginning to turn to America’s advantage. Confident that the Pacific Coast was now secure from enemy fire, the army began to dismantle the harbor defenses, and relocate troops from Bay Area posts to the Europe and Pacific theatres. The Bay Area was still very busy shipping thousands of men and millions of tons of cargo from the San Francisco Port of Embarkation. By the end of the war, more than 1.6 million men and 23 million tons of supplies, food, medical equipment and vehicles had passed through the Golden Gate on its way to the Pacific islands.

Above: Fort Cronkhite soldiers off-duty and at-ease in front of a barracks building. (Photo circa 1942)
Continue to walk down Kirkpatrick Street back towards the parking lot and stop between Buildings 1069 and 1070. On your way, notice Building 1077, the large rectangular building on your right, which was constructed as the service club and later an informal recreation lounge for enlisted men.

8 Fort Cronkhite after the War

Over the years, Fort Cronkhite continued to play many different military roles. In 1944, as men in active duty were transferred overseas, the army established the Commando Combat School here. The school, the first of its kind in the Western Defense Command, trained officers from the U.S. Army, Coast Guard and California State Guard in commando tactics, combat training and leadership skills.

In 1943, the invention of radar used to detect approaching ships and planes increased the effectiveness of the 16-inch guns and the nearby antiaircraft guns. But Fort Cronkhite, like so many other coastal artillery posts, was soon to be stripped of its guns, which had been made obsolete by long-range bombers, missiles and the atomic bomb. During the 1950s, Korean War soldiers were stationed here and during the Cold War in the 1960s and early 1970s, Fort Cronkhite became the home base for soldiers operating the nearby Nike missile site, one of the 300 across the nation. By this point, the army had removed most of the eastern half of the Fort Cronkhite wood-frame buildings and replaced them with new cinderblock barracks constructed for the Nike site personnel. By 1974 the two Nike sites in the Marin Headlands had closed and the army began to deactivate the former post altogether.

The Post Today

Fort Cronkhite now has a new life as part of the Golden Gate National Recreation Area, a unit of the National Park Service, where its military history is being interpreted for future generations. As you look around, you will see that most of these “temporary” wood-frame buildings built by the army nearly 70 years ago are still being used today. In addition to providing office space for the National Park Service, this former World War II cantonment is now home to many nonprofit, educational and environmental park partners.

This marks the end of the tour. Please feel free to return to the parking lot by continuing straight down Kirkpatrick Street or continue to explore the post. Walk over the bridge to Rodeo Beach or up the hill to Battery Townsley to take in the outstanding views of the Pacific Ocean. Thank you for visiting today and please come back to discover more stories of this World War II army post.