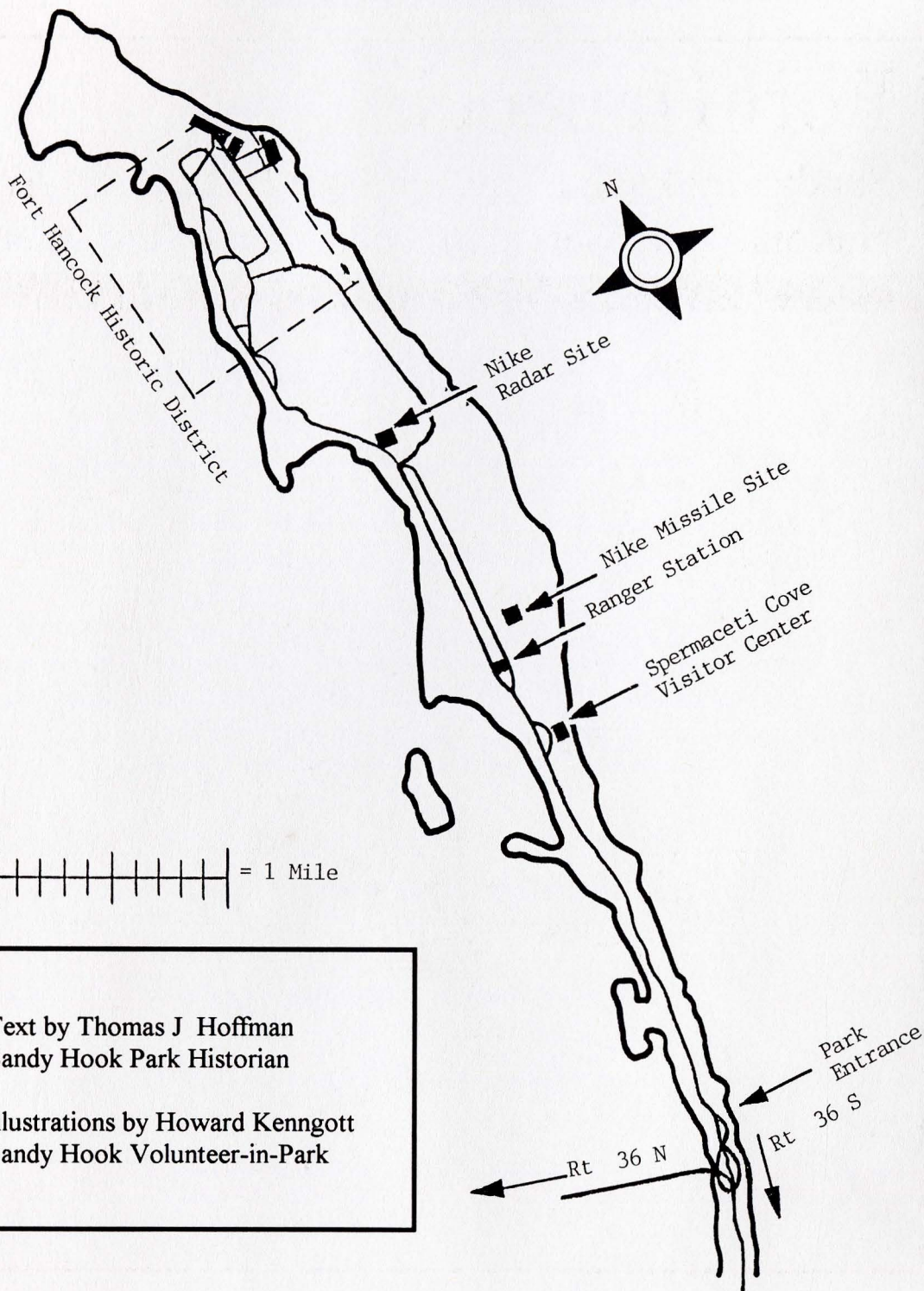


# Fort Hancock

Sandy Hook/Gateway National Recreation Area  
National Park Service/Department of the Interior





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Sandy Hook Park Historian

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Sandy Hook Volunteer-in-Park



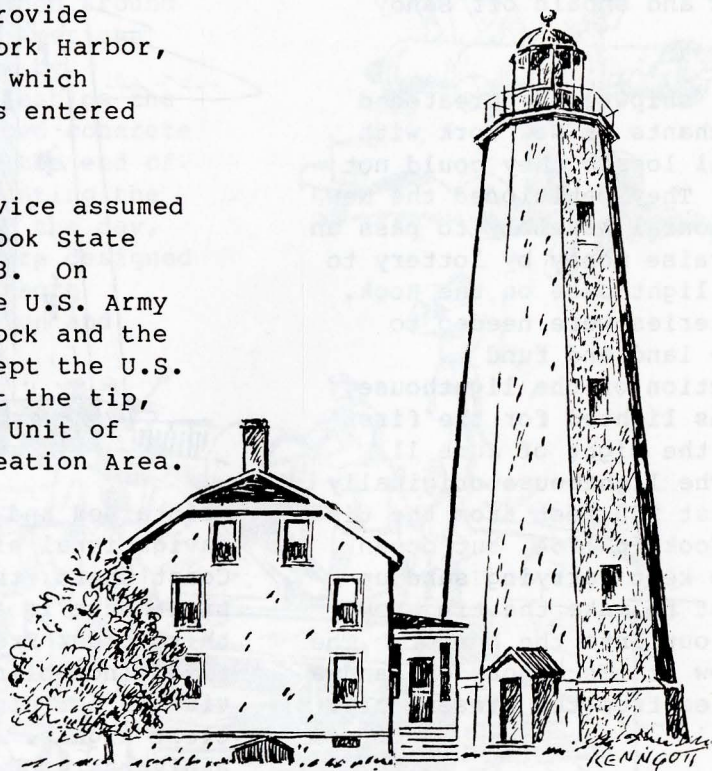
Sandy Hook is a long, slender sandbar peninsula that stretches almost six and a half miles into lower New York Harbor. Its strategic location at the harbor entrance made it an important navigational landmark and a key defense site to protect New York City from enemy attack. It was also remote enough to be used as a location to test military weapons.

Nearly all of Sandy Hook is a unit of Gateway National Recreation Area, administered by the National Park Service, U. S. Department of the Interior. Gateway National Recreation Area was created by Congress in 1972 to provide parkland around New York Harbor, the "Gateway" through which millions of immigrants entered the New World.

The National Park Service assumed possession of Sandy Hook State Park in December, 1973. On December 31, 1974, the U.S. Army deactivated Fort Hancock and the entire peninsula, except the U.S. Coast Guard Station at the tip, became the Sandy Hook Unit of Gateway National Recreation Area.

The Station is closed to visitation, but you may hike to the end of Sandy Hook along the ocean shore.

Sandy Hook's historical significance was officially recognized when the entire peninsula was designated a National Historical Landmark on December 17, 1982. The Sandy Hook Unit of Gateway National Recreation Area keeps the many stories of this important historic and natural area alive.

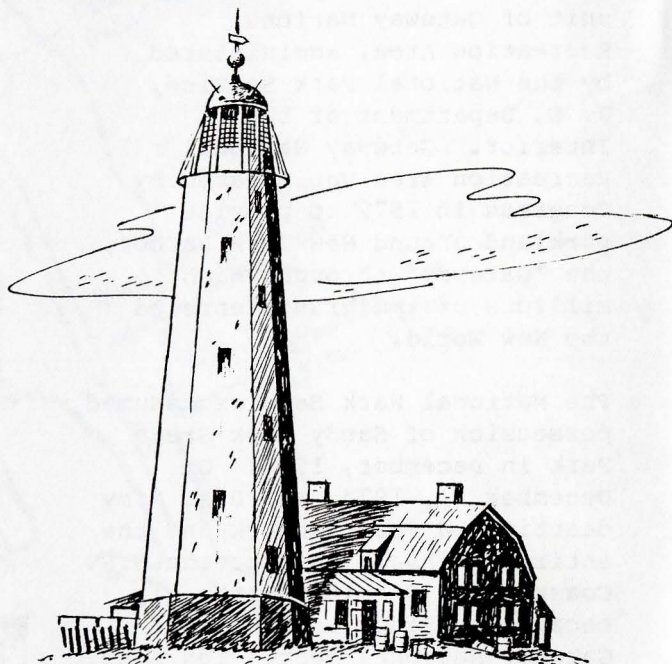


## NAVIGATIONAL LANDMARK--THE SANDY HOOK LIGHTHOUSE

Throughout the 1600's and well into the 1700's a growing number of sailing ships carried immigrants and commerce to and from New York City. These ships had to use the narrow curving channel around the tip of Sandy Hook to sail into the harbor. As these ships attempted to navigate the channel, which according to one New York Governor was "...so near the point that from on board one might toss a biscuit cake on shore..", wind and weather combined to wreck many of them on the shifting sandbars and shoals off Sandy Hook.

By 1761, shipwrecks threatened the merchants of New York with financial losses they could not afford. They petitioned the New York Colonial Assembly to pass an act to raise money by lottery to build a lighthouse on the Hook. Two lotteries were needed to purchase land and fund construction of the lighthouse, which was lighted for the first time on the night of June 11, 1764. The lighthouse originally stood just 500 feet from the tip of the Hook in 1764, but ocean currents kept carrying sand up the coast to make the tip grow farther out into the harbor. The tower now stands almost one and a half miles from the present tip.

During the American Revolution, local British Loyalists used the lighthouse as a stronghold, which local patriots called the "Lighthouse Fort." The Sandy Hook Lighthouse survived the American Revolution and is today recognized as the oldest lighthouse still in use in the United States.

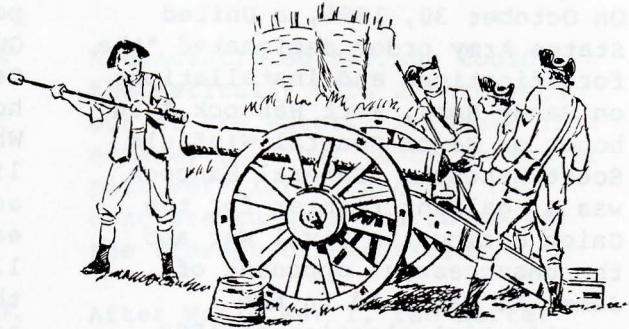


Maintained and operated as a navigational aid by the U. S. Coast Guard, the Sandy Hook Lighthouse is automated and has a third-order Fresnel lens with a fixed (non-blinking) white light, visible for nineteen miles on clear nights. In 1964, the 200th anniversary of it's first lighting, the Sandy Hook Lighthouse was declared a National Historic Landmark.

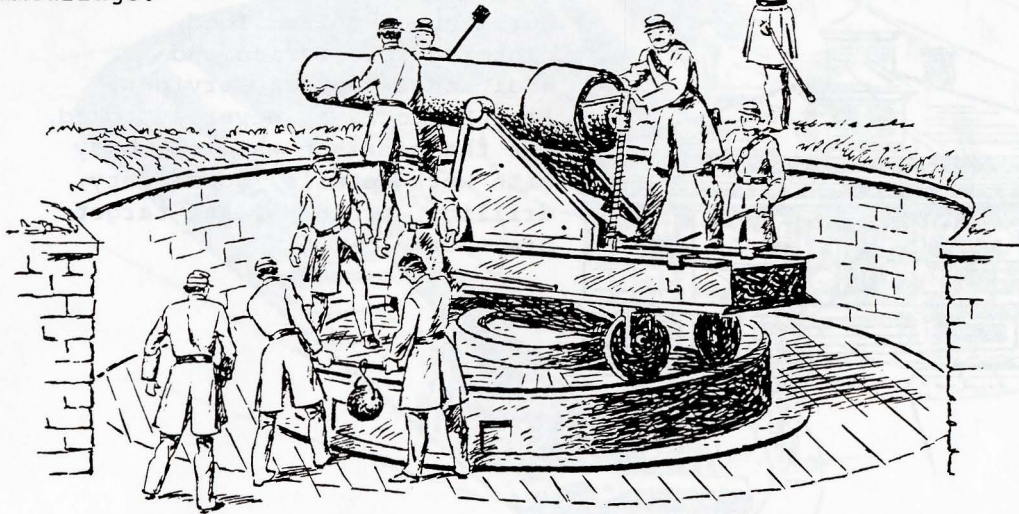
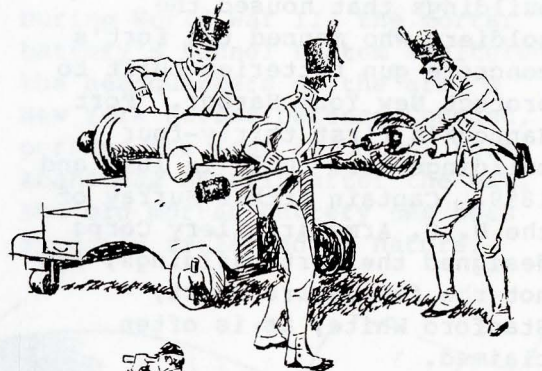


## SANDY HOOK DEFENSES: THE CONCRETE GUN BATTERIES

Sandy Hook's geographic location made it an extremely important defense site for the harbor area. Enemy warships had to sail well within cannon range of forts located here. Since the American Revolution, forts have occupied Sandy Hook during times of war. Each fort represented a new defense system reflecting technological advances in weapons, construction and tactics.



After the American Civil War, a number of foreign nations rebuilt their battle fleets to extend their power and influence around the world. To defend American harbors against attack by powerful foreign battleships the United States introduced concrete gun emplacements near the end of the 19th Century. Mounting the most modern weapons of the day, these gun batteries were designed to blend into the seashore landscape for protection and camouflage.

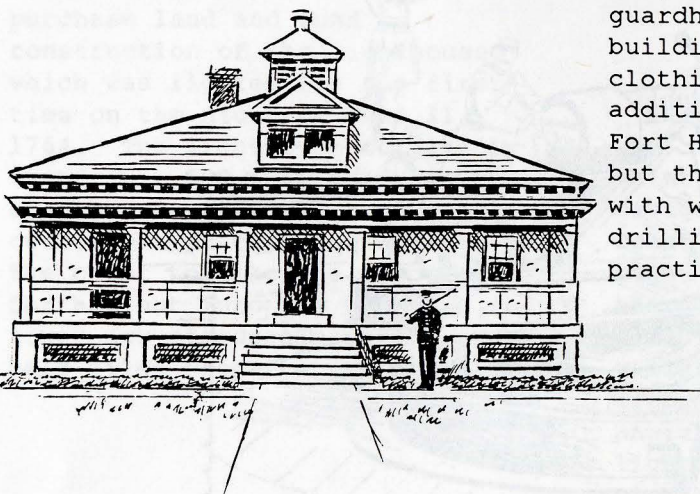




## FORT HANCOCK

On October 30, 1895, a United States Army order designated "the fortifications and installations on Sandy Hook, Fort Hancock," in honor of Major General Winfield Scott Hancock. General Hancock was a gallant fighter for the Union during the Civil War and the unsuccessful opponent of James A. Garfield in the presidential election of 1880.

Never a traditional walled fortress, Fort Hancock was a community of many permanent brick buildings that housed the soldiers who manned the fort's concrete gun batteries built to protect New York Harbor. Fort Hancock's first thirty-four buildings were built in 1898 and 1899. Captain Arthur Murray of the U. S. Army Artillery Corps designed the fort buildings, and not the famous architect, Stanford White, as is often claimed.



An outstanding feature of the post is the long row of Officers' Quarters. Each of the eighteen Georgian Revival style homes housed one officer and family. When constructed, the lieutenant's homes (Buildings 1-8 and 16-18) cost about \$8,200 each; Captains' houses (9-11 and 13-15), about \$12,000 each; and the larger commanding officer's house (12), \$19,000.

From 1900 through World War II, additional brick and wooden buildings, as well as "tent cities", were added to accommodate more soldiers. During peacetime, the fort's garrison numbered between four hundred and eight hundred officers and enlisted men. Its population peaked in 1945, when eighteen thousand men and women were stationed here.

The Fort Hancock Museum (Building 28) was constructed in 1899 and originally served as the post guardhouse (jail). Other fort buildings supplied food, clothing, protection and additional support services. Fort Hancock was never attacked, but the garrison was kept busy with work details, guard duty, drilling, training, and target practice.



## HIGH FIRING GUNS: THE SANDY HOOK MORTAR BATTERY

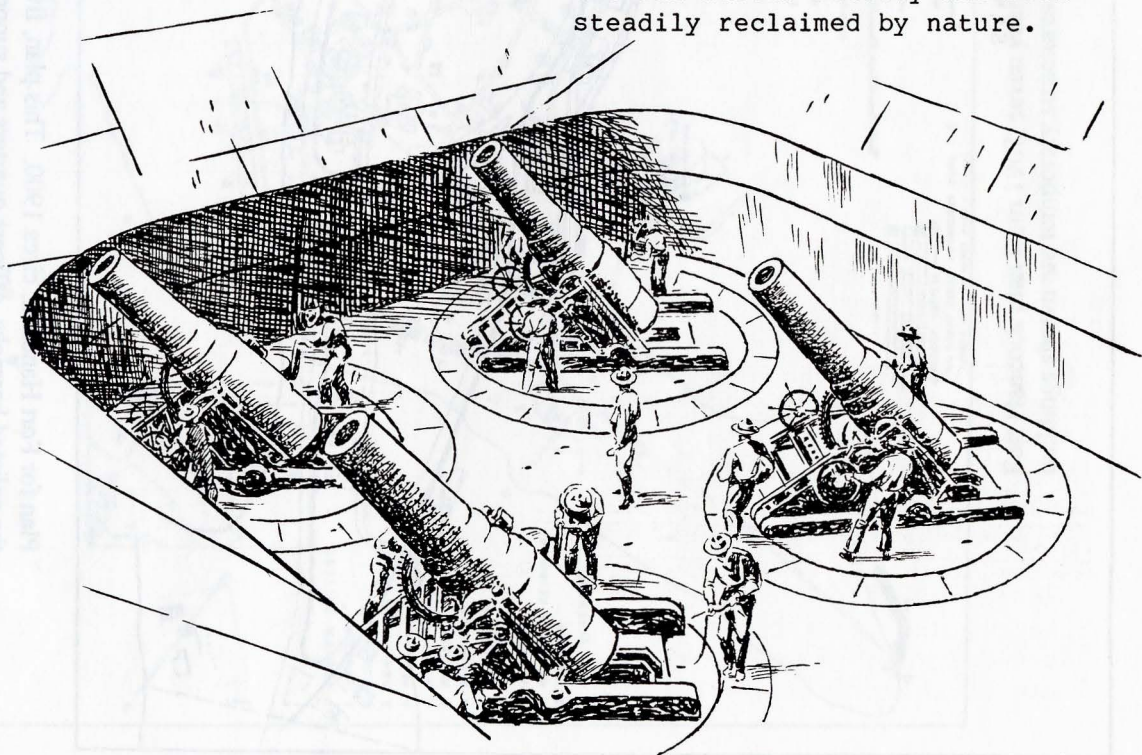
The Sandy Hook Mortar Battery was the first operational concrete gun battery of its kind built for American harbor defense.

Completed in 1894, this battery, along with Battery Potter, began a nationwide system of concrete coastal defense fortifications constructed between 1890 and 1910.

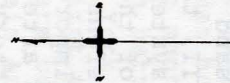
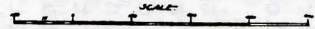
The mortar battery mounted sixteen 12-inch caliber mortars divided equally into four massive concrete and earth "firing pits." Firing simultaneously, these guns were designed to fire 700-pound armor-piercing projectiles in high arcs that could smash through the decks of enemy warships.

A concentrated barrage could theoretically blow a battleship out of the water. Arranged in a square, the four concrete mortar pits were interconnected by concrete tunnels and rooms for the storage of ammunition.

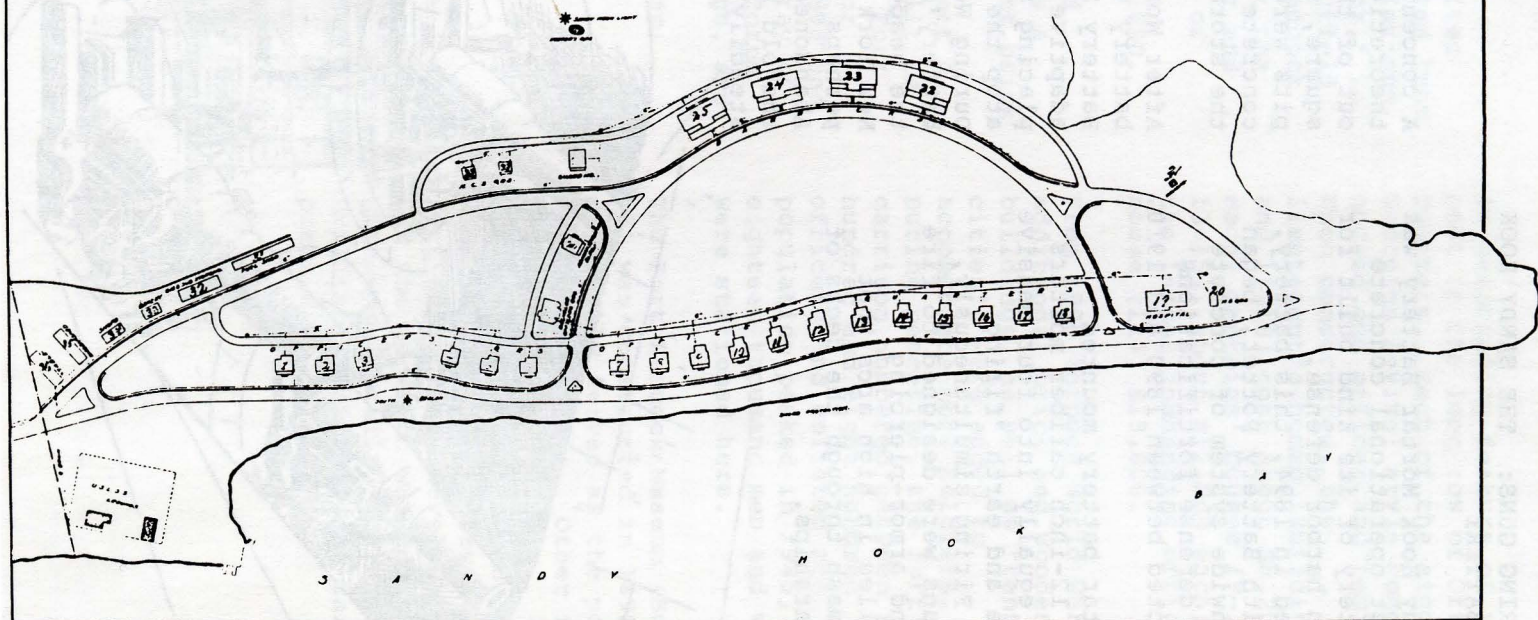
After World War I, the mortar battery was disarmed and, like Battery Potter, the army adaptively reused the battery by placing several antiaircraft guns atop the earthen-sand slopes. During World War II, the mortar battery's tunnel system sheltered the headquarters of the army's New York Harbor Defense Command, perhaps its most important role. Abandoned shortly after the war, the old mortar battery has been steadily reclaimed by nature.



# FORT HANCOCK, SANDY HOOK, NEW JERSEY



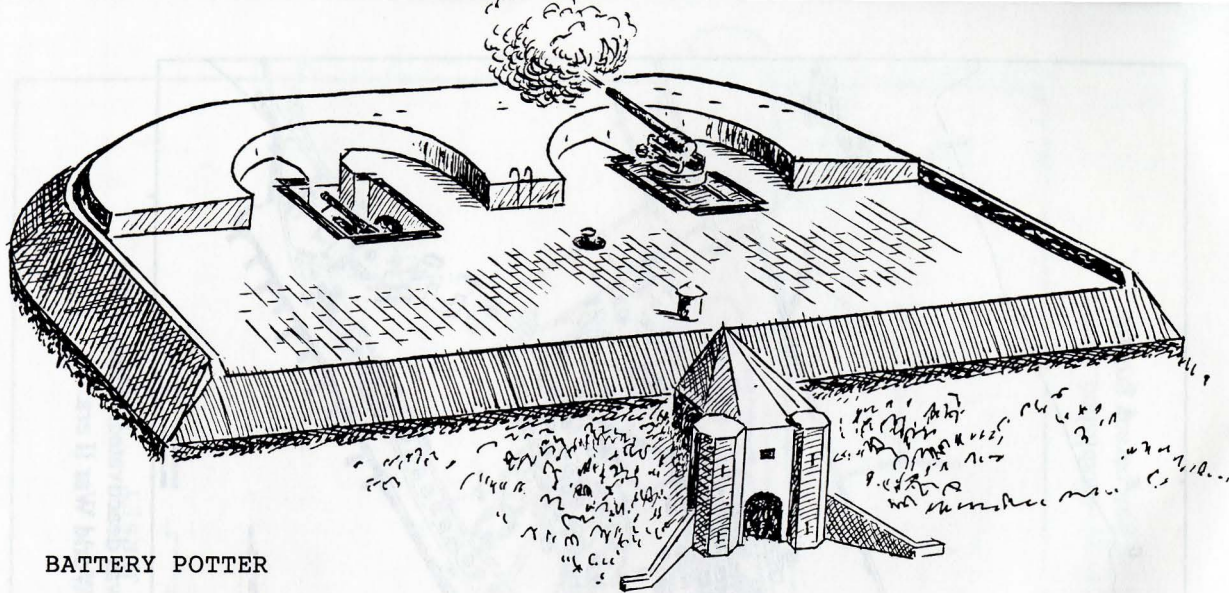
SEWER SYSTEM  
DRAIN  
FLUSH TANK  
MANHOLE  
WATER SYSTEM  
TIDE INDICANT  
VALVE



Plan for Fort Hancock, circa 1900. This plan, five years after the post was established, shows the enlisted barracks, officers quarters and support buildings around the post parade ground.







### BATTERY POTTER

Due to New York Harbor's geographical and commercial importance, Sandy Hook was chosen as the site for the nation's first concrete gun batteries. Starting in 1890, the Army began building the first and only steamed-powered, lift-gun battery ever built to protect an American Harbor. Originally designated "Lift-Gun Battery No. 1", it was later named in honor of General Joseph Potter, a veteran of the Civil War.

Completed in 1893, the battery contained two 12-inch caliber guns. Each 52-ton gun barrel was mounted on a large elevator platform powered by steam-pressure driven hydraulic machinery. The guns were loaded by soldiers inside the battery where they were protected by massive concrete walls. When loaded, each gun platform was lifted through a square opening onto the battery roof.

From the roof, the guns could fire half-ton projectiles at approaching enemy battleships and cruisers as far as seven miles offshore.

After firing, the gun platforms moved back down inside the battery for reloading. Since this procedure made the guns "disappear" from the enemy's view, soldiers started calling them "disappearing guns".

Ironically, Battery Potter was made obsolete soon after completion by the development of faster-firing, counter-weight operated gun carriages. Disarmed in 1906, the roof of Battery Potter was converted into target-spotting stations for Fort Hancock's other gun batteries. During World War II some of these stations also served as the "Advanced Harbor Entrance Control Post", which monitored all ship movements in and out of the harbor.

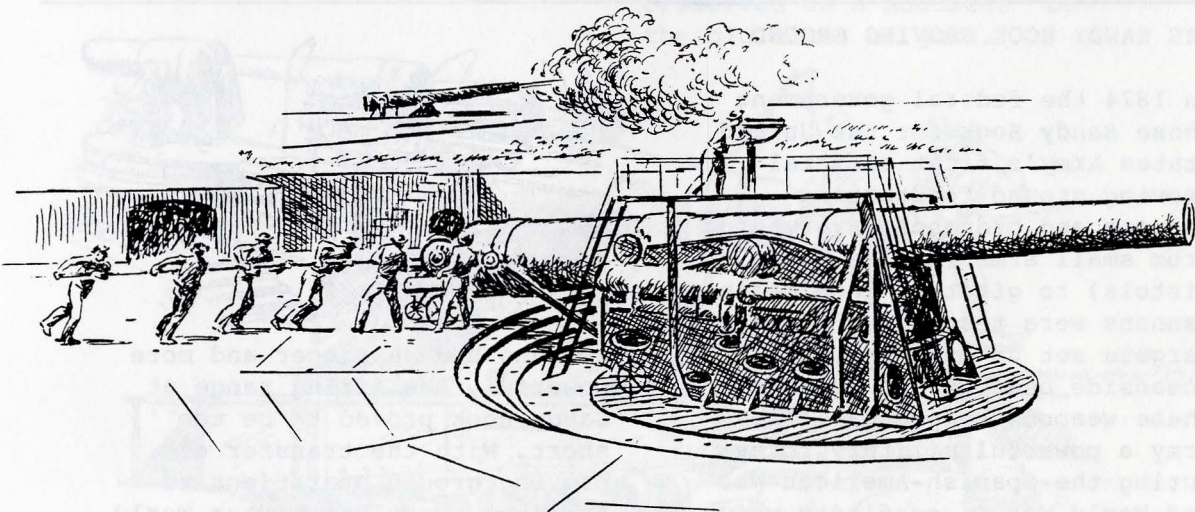


## THE DISAPPEARING GUNS OF BATTERY GRANGER

To improve the cost and efficiency of its gun batteries, the army developed simple counterbalanced gun carriages. A large counterweight connected to two pair of steel arms could raise a big gun barrel from behind a protective concrete wall very quickly. Pre-sighted by several soldiers tracking a target out to sea, the gun rose and fired. It then recoiled (kicked back) behind the emplacement wall and back into the loading position. A well-trained gun crew could fire two rounds a minute from a 10 or 12-inch counterweight mounted gun.

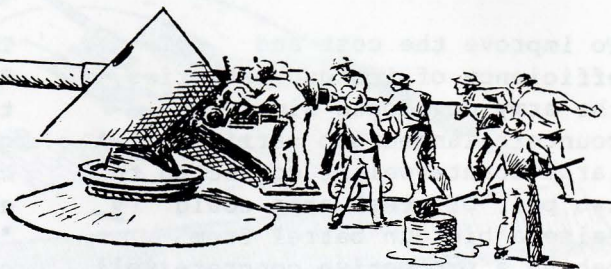
This was a big improvement over Battery Potter's two to three-minute rate of fire per gun. Mounted in simple, concrete-walled open pit emplacements, the counterweight "disappearing" guns doomed the complex elevator guns of Battery Potter.

South of Battery Potter Army engineers built Battery Granger, the first of Fort Hancock's counterweight gun batteries built between 1896 and 1909. Named after another Civil War Era General, Battery Granger mounted two 10-inch caliber disappearing guns that were in use from the Spanish-American War to World War II.



## THE RAPID FIRE GUNS OF BATTERY GUNNISON

Fort Hancock's arsenal of defenses included smaller gun batteries mounting guns of 3, 5 and 6-inch caliber. These smaller guns could be loaded, aimed and fired quickly to sink small, fast enemy warships such as destroyers, minesweepers and torpedo boats that could possibly evade the artillery fire of large caliber shore batteries.



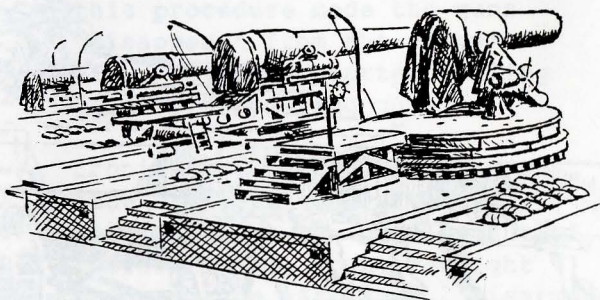
A good example of one of Fort Hancock's rapid-fire gun batteries is Battery Gunnison. Originally a 6-inch disappearing gun battery when built in 1904, it was converted to pedestal-mounted guns of the same caliber during World War II.

The 6-inch gun could fire at least two rounds per minute. Battery Gunnison's two Model 1900 6-inch guns remain the only remnants of all the guns that made up the Fort Hancock defenses on Sandy Hook. All the other guns were recycled to help the World War II munitions effort, or were scrapped just after the war.

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## THE SANDY HOOK PROVING GROUND

In 1874 the federal government chose Sandy Hook for the United States Army's first official proving ground for testing weapons and ordnance. Everything from small arms (rifles and pistols) to giant 16-inch caliber cannons were test fired at targets set up on the Hook's oceanside beaches and dunes. These weapons helped make the army a powerful military force during the Spanish-American War and World War I, conflicts which made the United States a world power.



As guns became bigger and more powerful, the firing range at Sandy Hook proved to be too short. With the transfer of proving ground operations to Aberdeen, Maryland, after World War I, Sandy Hook's significant role in the development of American military ordnance passed into history.



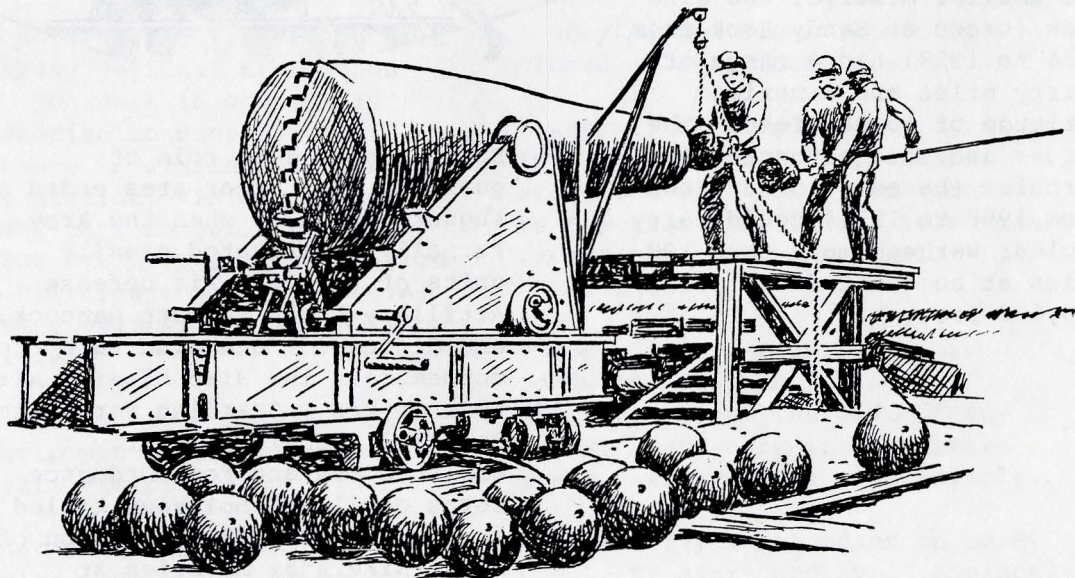
## THE 20-INCH RODMAN GUN NO. 2

This 20-inch caliber cannon is one of the largest muzzle-loading, smooth-bore cannon ever made. The gun is a monument to the inventive genius of the man who created it, U. S. Army Officer Thomas J. Rodman. Rodman's special casting method and gun barrel design made possible the manufacture of large caliber, cast-iron smoothbore cannon.

During the Civil War, many 8, 10 and 15-inch Rodman Guns were produced. These guns became the standard seacoast weapons at American harbor forts during the war. In 1864, Rodman proceeded to cast an even bigger gun. The No. 1, 20-inch Rodman Gun was mounted at Fort Hamilton, Brooklyn, New York, where it still stands.

When loaded with a two hundred pound powder charge, this gun fired a one thousand pound cannonball almost five miles, a range unheard of at the time.

The No.2 20-inch Rodman Gun, weighing 115,100 pounds, was cast in 1869, but by this time was technically obsolete. The Civil War had introduced breech-loading, rifled-bore guns which proved to be more accurate and powerful than the smooth-bore Rodmans. The No. 2 Rodman was sent to the Sandy Hook Proving Ground where it lay unused in an "ordnance graveyard" of old and obsolete guns. In 1903, it was saved from scrapping. The commander of Fort Hancock requested that the cannon be transferred from the proving ground so that it could be preserved as a monument "to the old class of guns."





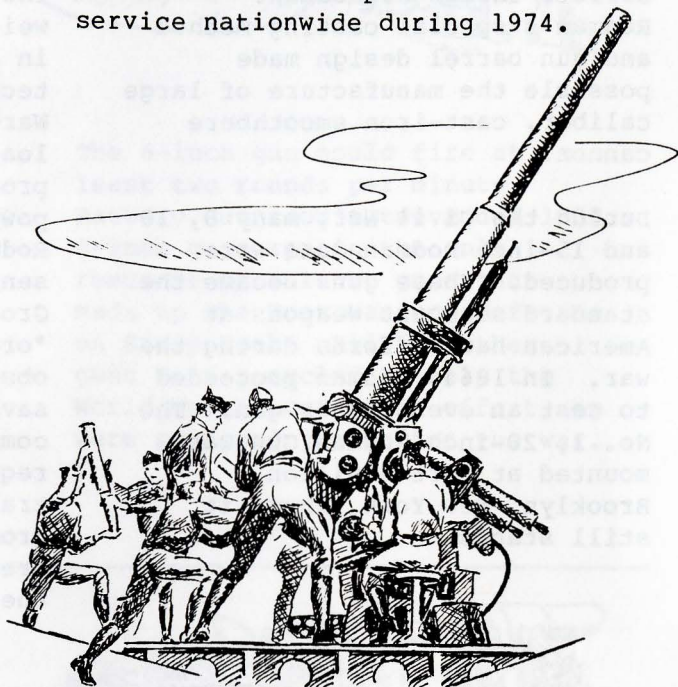
## GUARDIAN PARK

The Nike Missiles displayed at "Guardian Park" are a monument to the last descendants of America's coastal defenses. Between the World Wars coast artillery fortifications became increasingly threatened as warplanes were developed. This led to the development of anti-aircraft guns which were used to protect seacoast defenses from air attack.

The awesome weapons and changing tactics developed during World War II finally made the concept of defending harbors with artillery obsolete. Following the Korean War army anti-aircraft guns were replaced by Nike Air Defense Missiles. These missiles were designed to intercept and destroy fast, high altitude jet warplanes before they reached the metropolitan area.

The smaller missile, the Nike Ajax (based at Sandy Hook from 1954 to 1959) had a range of thirty miles and a maximum altitude of 60,000 feet. The larger and more advanced Nike Hercules (based at Sandy Hook from 1958 to 1974) could carry a nuclear warhead more than 100 miles at an altitude of over 150,000 feet.

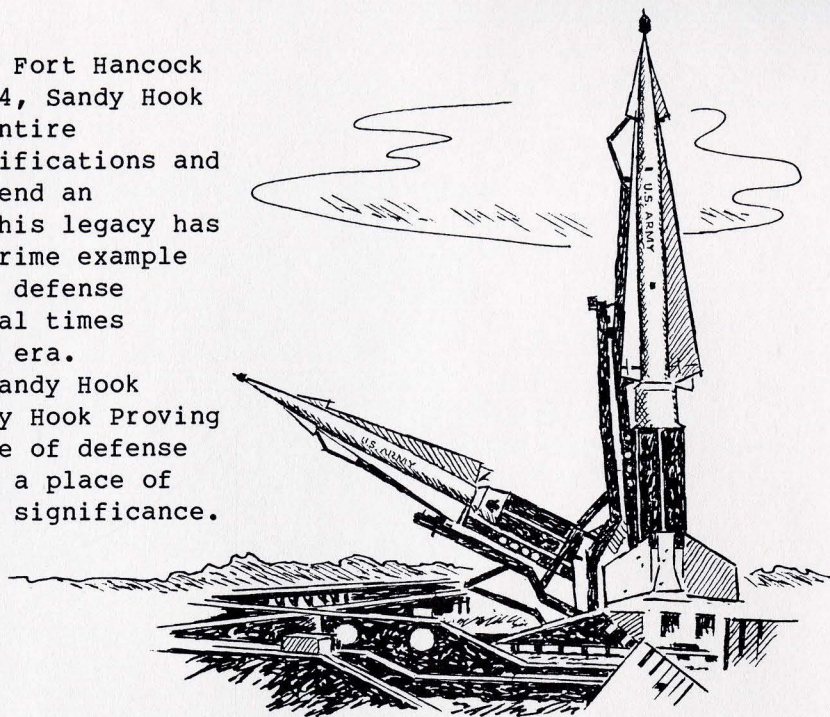
Constant technological development during the 1960s led to the introduction of the Intercontinental Ballistic Missile. Not designed to intercept a faster missile the Nike Hercules was phased out of service nationwide during 1974.



Sandy Hook's long role of guarding the harbor area ended on August 15, 1974, when the Army formally deactivated missile units of the 16th Air Defense Artillery Group at Fort Hancock, and dedicated "Guardian Park" to commemorate the Nike Missile Air Defense Era. Guardian Park also memorializes six U.S. Army enlisted men and four Ordnance Corps civilian employees killed in the May 22, 1958 explosion of eight Nike Ajax missiles at nearby Leonardo, New Jersey.



With the closing of Fort Hancock on December 31, 1974, Sandy Hook had witnessed the entire progression of fortifications and weapons used to defend an American Harbor. This legacy has made Sandy Hook a prime example of American coastal defense history from Colonial times through the missile era. Combined with the Sandy Hook Lighthouse and Sandy Hook Proving Ground this heritage of defense has made Sandy Hook a place of National historical significance.



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Sandy Hook is the New Jersey Unit of Gateway National Recreation Area. The park is open daily from sunrise to sunset. Assistance is available at the ranger station, visitor center or from any park ranger. Please call 908-872-5970 for information about visiting the park, special programs, events, and scheduled activities.

The following park regulations will help you have a safe and enjoyable visit:

- \* Do not enter or climb on gun batteries, buildings, or other structures.

- \* Obey posted signs regarding closed or restricted areas.

- \* Any military ordnance (projectiles, bullets, weapons, etc.) found on Sandy Hook should be reported immediately to a park ranger. DO NOT HANDLE ANY ORDNANCE.

- \* Vehicles are prohibited off roadways. Parking is not permitted along the side of any roads. Park only in designated areas. Always lock your vehicle.

- \* Poison Ivy is abundant on Sandy Hook. Be alert and avoid contact.