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An Island at War : The Peaks Island Military Reservation, 1942 - 1946

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An Island at War

The Peaks Island Military Reservation 1942-1946



- A self-guided tour -

Peaks Island Branch Library 129 Island Avenue Peaks Island, ME 04108

The Peaks Island Military Reservation Trail

1942 - 1946

Written by Joel W. Eastman Kimberly A. MacIsaac

A Project of

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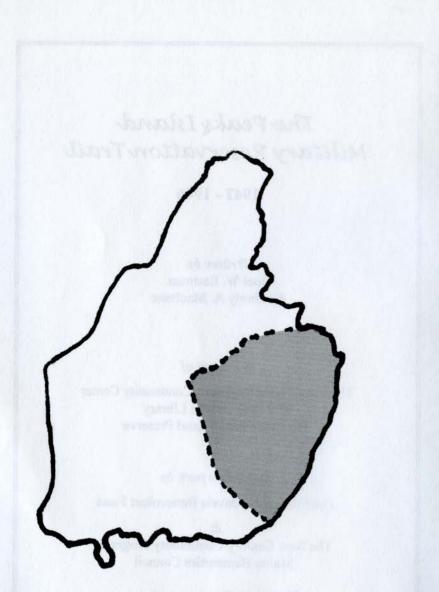
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Peaks Island, Maine Shaded area shows location of Peaks Island Military Reservation.

Introduction

Welcome to the Peaks Island Military Reservation Historic Trail! The beginning of the trail is marked by a small red, white and blue arrow at the intersection of Seashore Avenue and Alderbrook Road.

After the outbreak of World War II in Europe in 1939, Casco Bay became the most important harbor in the continental United States because of its closeness to Europe. Portland became the headquarters for the U.S. Navy's destroyers in the Atlantic and an anchorage for the Atlantic Fleet. Convoys of supply ships, destroyers, cruisers and battleships assembled in Hussey Sound to refuel at the Navy Fuel Depot on nearby Long Island before making the dangerous passage across the North Atlantic to Britain and Russia. It was the responsibility of the U.S. Army Coastal Artillery to protect the anchorage, but the turn of the century forts, which defended the harbor, were now obsolete.

With American entry into the war after Pearl Harbor, the army undertook a huge modernization project, and Peaks Island was selected as the most important of the new defense sites. 198 acres of land was taken by eminent domain by the government and a massive construction project was begun and completed by 1944. Fifty-eight buildings were constructed to accommodate approximately 800 soldiers at a cost of nearly \$2.3 million. A huge forest fire in 1957 destroyed all but 12 of the buildings on the reservation.

Today, we will take you on a tour of the Peaks Island Military Reservation, describing the extent of the defenses and pointing out the structures that survive. As we begin, I want to remind you that most of the land and all of the structures within the reservation are privately owned and, with the exception of Battery Steele, are not open to the public. Please remain on the roadways while following the trail unless instructed to do otherwise. The path of the trail is marked by 14 trail signposts and orange dots painted on trees along the roadways. Just follow the numerically coded map that accompanies this guide.

To begin, walk up Alderbrook Road and watch for Site One on your left at the intersection of Alderbrook and Sandpiper Roads.

Enjoy the tour!

Site One: Right side of intersection of Alderbrook Road and Sandpiper Road.

One of the biggest concerns of the Army and Navy was attacks by enemy torpedo boats. These high speed vessels could be dropped by destroyers or battleships, slip into an anchorage, and inflict great damage on warships with their torpedoes, as had been shown in Europe. The army built Anti-Motor Torpedo Boat Batteries to cover every entrance to the harbor. One of these AMTB Batteries was located on this plot of ground to defend Whitehead Passage. It consisted of four rapid-fire 90 mm guns, two mounted on concrete gun blocks and protected by a steel shield and two mobile guns, plus two 37 mm mobile guns. The most obvious remains of the battery are the concrete slabs which served as the foundations and floors of the wooden barracks where the men of the battery lived along Sandpiper Road and a gun mount located near the signpost. A large cottage was used as the administration building and officers' club. A number of new private homes have been built on this site.

Continue walking up Alderbrook Road until you see the Site Two marker on your left diagonally across from an earth covered concrete structure with tall evergreen trees in front of it. Watch for the orange dots to be sure that you're headed in the right direction. Through the woods on your right is a man-made earthen dyke that was constructed by the army to create a pond and act as a protective moat in front of Battery Steele. It is difficult to see when the leaves are on the trees. More will be said about the dyke at Site Three



Nests for 90 mm guns at AMTB battery A. Kenworthy photograph

Site Two: Diagonally across from the Battery Steele Plotting Room on Alderbrook Road

The largest battery built on Peaks Island was Battery Steele. The concrete building across from the Site Two signpost is the Plotting Room for that huge battery. The plotting room is built of reinforced concrete and was protected on the ocean side by a huge burster course, a thick layer of concrete designed to cause an incoming shell to explode before it struck the roof of the plotting room. The plotting room was covered with earth and planted with grass, shrubs and trees for camouflage. The building had its own heating and air-conditioning systems, and the air was filtered to protect the personnel in case of a poison gas attack. Inside the structure was a huge plotting board where the course of enemy vessels was tracked based on data provided by a series of observation towers on the island and throughout the bay, and by radar. A mechanical data processor, an early computer, calculated the range and direction of a target by triangulating the distances between the target and at least two observation towers. The plotting room also included a telephone switchboard room and a radio room in order to communicate with the observation towers, radar operations building, other gun batteries, and headquarters.

A good deal of the gravel that covered this building has been removed for use in septic systems elsewhere on the island. The plotting room building is privately owned, very dark, and the floor has many holes that could cause serious injury. For own your safety, please do not try to enter this building.

Now continue along Alderbrook Road to the intersection with Florida Avenue, the site of the public works transfer station. (Again, follow the orange dots) Turn right onto Florida Avenue and watch for the Site Three signpost on the right, in front of the first entryway into Battery Steele, a huge, earth covered concrete structure.



Soldiers working in the plotting room fifth maine collection

Site Three: Street side of Battery Steele on Florida Avenue

Battery Steele is not only the largest gun battery built on Peaks Island, but also an example of the largest battery ever built anywhere in the United States. The structure is over 300 feet long and built of reinforced concrete, then covered with earth and rock and planted with grass, shrubs, and trees for camouflage. The army excavated a large amount of gravel from other areas of the island and used it to cover Battery Steele, Battery Cravens, the Battery Steele plotting room building, and other concrete structures you will see on the tour. Battery Steele was equipped with two 16 inch battleship guns, one on each end of the building, mounted within casemates protected by cast steel shields. The guns fired a 2000 pound projectile 26 miles. [Following WWI, this type of gun had been made surplus by the Washington Naval Disarmament Treaty of 1921, but were used by the army in World War II.] A corridor connects the two guns and off the corridor are rooms where the projectiles and powder bags were stored and a poison gas proof latrine where the 190 men who manned the battery could wash up. In the rear of the building, near the middle doorway, was an electrical power plant. Three huge diesel engines turned generators which provided all the power needed to operate the battery. Upon completion, these guns were test fired by officials from the Pentagon with, according to some island residents, disastrous

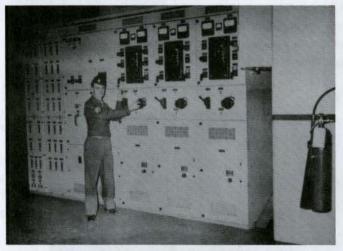


16" gun at Battery Steele Angelo Cantalupo photo

results – the vibrations caused nearly every window pane on the island to break. This is one of the few American gun batteries to be named during World War II. The battery was named for Major General Harry Lee Steele who was appointed Chief of the Coast Artillery Corps in 1935.

The land that Battery Steele sits on was originally a marsh. The Corps of Engineers drained the site, erected a dyke that runs along Alderbrook Road, thereby creating Trout Pond, the large body of water that lies between the Battery and Seashore Avenue. For many years after the war, Trout Pond was a favorite swimming hole of island youngsters – until increasing numbers of snapping turtles in the pond chased them away.

Following the war Battery Steele, valued at \$2.3 million, was sold by the government for \$40,000, and subsequently passed through several owners. In the 1960's the Casco Bay Island Development Association tried to build a conference center for United Nations personnel atop the battery. Later, in the early 1980's, the Solar Technology and Research Foundation (STAR) established organic gardens and solar greenhouses on the property and planned to grow mushrooms inside the battery. Today, Battery Steele and its adjacent 14 acres are owned by the Peaks Island Land Preserve and is protected by conservation easements. The battery is open to the public, but pass at your own risk and use a flashlight.



Power generator in Battery Steele A. Cantalupo photo

Next, look for Site Four on your left at the intersection of Florida Avenue and Maine Street across from the middle door of Battery Steele.

Site Four: Intersection of Florida Avenue and Maine Street

As mentioned earlier, it required 190 men to man Battery Steele. In addition, 123 men were needed to man Battery Cravens, which we will see later. Thus, a large number of buildings were required to house, feed, transport and entertain the troops. All of the buildings were built of wood on concrete slabs or posts, and were considered temporary. Proceed along Florida Avenue about 75 ft. past the Site Four signpost. On this triangular plot of land to the left, formed by the intersection of Florida Avenue, Maine Street, and Brackett Avenue, stood four buildings: the post headquarters, two barracks, and the motor pool, a garage where vehicles were stored and serviced. In front of the post headquarters stood the post flagpole, where the colors would be raised and lowered to begin and end each day. The slab foundation of the motor pool building is still visible in the triangle, flush with the ground The raised, tree-covered mound just behind the signpost was the foundation of the post headquarters. The STAR Foundation's two solar greenhouses stood in the center of this area during the 1980's.

Now walk back to the Site Four signpost and take a right onto Maine Street to the intersection of Brackett Avenue and Reservoir Road where you will see Site Five on the left.



Motor pool building (l) and post headquarters (r) Portland Press Herald staff photo

Site Five: Corner of Brackett Avenue and Reservoir Road

Brackett Avenue was the main entrance to the Peaks Island Military Reservation. The army had its own ferry boats and its own wharf on Peaks Island, which was located adjacent to Forest City Landing. The current 'army wharf' replaced the original in the mid 1990's. During the war there would have been a gate and sentry post at the entrance. (The small foundation for the sentry post



Sentry Post - Peaks Island fifth maine collection



Army boat at the dock fifth maine collection

is still visible about 300 yards to your left on Brackett Avenue.) Behind the signpost is the concrete foundation of the Non-Commissioned Officers School. On the other side of Reservoir Road were three barracks buildings constructed on posts so no foundations can be seen. This area, which is enclosed by Reservoir Road, Massachusetts and Brackett Avenues, and Jewell and Bayberry Roads, was the site of nine barracks, a mess hall, a latrine, and a post exchange.

Continue walking along Reservoir Road until you reach Site Six signpost about 500 feet on the left side of the road.



Non-commissioned officers school Col. John Sapp photo

Site Six: Halfway along Reservoir Road

In the woods just beyond the Site Six signpost you will see the foundation of another barracks building. On the other side of the road you will see an unusual looking concrete structure with a single entrance in the front. This is the post water reservoir. There is a small control room in the front and behind is a large concrete structure which contained two huge steel water storage tanks to supply the drinking, washing, cooking and fire protection needs of the reservation. The reservation's extensive deep water piping system is now connected to Portland Water District mains and serves the many new homes that have been built in the reservation area. Do not try to enter the reservoir building. It is dark and full of hidden holes in the floor, making it quite hazardous to enter. It is privately owned and not accessible to the public.



Enlisted men's barracks J. Eastman photo

As you continue walking up Reservoir Road, you will pass the foundation of the mess hall building on your right. The Site Seven signpost is just ahead at the intersection with Massachusetts Avenue.



John Thornton sitting on the steps of his barracks A. Cantalupo photo

Site Seven: The Intersection of Reservoir Road and Massachusetts Avenue

In back of the signpost at this intersection is the foundation of the fire station that served the reservation. On the opposite side of the street is the foundation of a barracks, and across Massachusetts Avenue was a large recreation building to serve the enlisted men. (The foundation for the recreation building was recently removed to provide access to the newly built house behind the birch twig fence on the left.) Here the latest movies were shown and the men could play pool and other games. After the war, island residents were allowed to use the recreation building. Sunday afternoon movies kept the children occupied while their fathers played billiards. To the left of the recreation building was the dispensary, where medical care was administered. Only a small foundation exists since most of the dispensary sat on ledge outcroppings.

Turn right onto Massachusetts Avenue and continue up the street. You will see the foundation of the administration and officer's club on your left. If you look across the street from this spot you will see a brown house. Bear to the right at the traffic circle in front of the brown house. Site Eight is on your left about 400 feet beyond the brown house.



Dispensary (1) mess hall (c), fire station (r) Portland Press Herald staff photo

Site Eight: Left side of Jewell Road.

Across the street from the marker is the foundation of a latrine and shower building. None of the barracks buildings contained bathrooms so a number of latrine/shower facilities were located throughout the reservation. Near this latrine were several more barracks, but only one foundation still exists. Take a few moments to look at the map. Now, picture in your mind the facilities that surround you – behind the latrine is the water reservoir building, the company mess, and two barracks that you passed on Reservoir Road. Behind you, though not visible, is Battery Cravens. Had you continued straight through the traffic circle rather than turning onto Jewell Road, you would have passed the concrete footings for the radar tower, the site of the radar generator building, and more barracks.

Continue on Jewell Road to the third orange dot on the tree on the right side of the road.

Look into the woods behind the tree with the orange dot and you will see the foundation of the post exchange. This building housed a post office, telephones, and a PX where soldiers could purchase cigarettes, toiletries, candy, gum, and soda. Across the street from the post exchange was another barracks. Again look at the map to see the proximity of these buildings to the post headquarters and motor pool by Battery Steele and the mess hall on Reservoir Road.

Continue ahead to the end of Jewell Road where it intersects with Whaleback Road. Turn left onto Whaleback Road at this intersection and follow the orange dots on the trees. At the curve on Whaleback Road you will see the Site 9 marker on your right.



Latrine and shower building J. Eastman photo

Site Nine: Battery Cravens on Whaleback Road

We are standing directly opposite one of the gun mounts of the second largest battery on Peaks Island, Battery Cravens. This battery mounted two 6 inch guns protected by cast steel shields mounted on concrete gun blocks adjacent to each end of this concrete structure. These guns fired a 200 pound projectile 15 miles, and were designed to defend against enemy naval vessels such as destroyers and destroyer escorts. Inside the concrete structure a corridor connects both gun positions and along the rear of the corridor are rooms where the projectiles and powder bags were stored. In the rear of the battery was a poison gas proof plotting, telephone switch board and radio room to communicate with observation stations, the radar operations room, other batteries and the post headquarters. The plotting room held a large plotting board and an electronic data processor to calculate the range and direction of a target. Across the corridor was an electrical power plant, where three diesel powered generators provided all the power needed to operate the battery. The battery was covered with earth and planted with grass, shrubs and trees for camouflage, but the earth cover has now been removed from the battery in preparation for the construction of several private homes. Several practice rounds were fired after the battery was completed. The battery was named for Colonel Richard Kerr Cravens, Coast Artillery Corps, who was awarded the Distinguished Medal for his participation in World War I. This facility is privately owned and the entrances were purposely blocked to prevent access by trespassers. Please do not try to enter the battery.

A radar tower and generator building that provided power for the radar, were located behind Battery Cravens. The rotating radar antenna on top of the tower was enclosed in a round wooden building designed to look like a water tank. Near the tower was the radar operations room where the operators sat watching radar screens for targets. The data on the range, direction and speed was sent to the plotting rooms of either Battery Steele or Battery Cravens. Radar allowed the batteries to fire accurately day or night, good weather or



6" gun, Battery Craven A. Cantalupo photo

bad. In the area beyond the radar tower were four barracks, a latrine, and two cottages, one of which was used as an administration building.

Continue along Whaleback Road until it intersects with Seashore Avenue where you will turn left and walk about 400 feet to Site Marker 10.

Site Ten: To the left of the intersection of Whaleback Road and Seashore Avenue.

Behind the marker you see a white concrete observation tower that housed a range-finding telescope used to locate targets for the two antimotor torpedo boat batteries located adjacent to it. The soldiers assigned to the two AMTB batteries often practiced firing these guns. Their target was a small wooden boat, painted bright yellow, that cruised back and forth in the water off Seashore Avenue. This boat was remotely controlled from the shore.

Now look toward the ocean and picture it filled with hundreds of ships liberty ships carrying badly needed food and equipment for Britain and Russia, destroyers, cruisers, and battleships. The ships would come north from as far away as Virginia, refuel at the Navy Fuel Depot on nearby Long Island, then form convoys for the dangerous trip across the North Atlantic. Some of the sailors whose ships were moored here in Hussey's Sound, the area between Peaks and Long Islands to your left, claim that it was possible to walk from Peaks to Long Island simply by crossing the decks of the ships moored side by side.



AMTB 90 mm guns A. Kenworthy photo

On the Peaks Island side of Hussey Sound is an underwater outcropping of rock that was struck by the battleship *Iowa* as she tried to pass through the sound after refueling at Long Island. 75 feet of the *Iowa's* keel were destroyed. After this incident, navy divers blew out a portion of the rock to prevent another such accident. It has been known as "Soldier's Ledge" ever since.

Now continue on Seashore Avenue towards the Site Eleven marker which will be on your right.

Site Eleven: Across from the 3 story tower and the mine casemate building on Seashore Avenue.

When you reach the marker, turn around with your back to the ocean and look to your left. You will see a three story concrete building about 300 feet away on your left. This was the minefield command station on Peaks Island. During the war, a covered porch surrounded three sides of the building to make it look like a summer cottage. A mine layer boat planted the mines in Hussey Sound after Pearl Harbor was attacked on December 7, 1941. The army was responsible for controlled mines which were connected by electrical wires to the shore and could be detonated by flipping a switch. These mines were much more powerful than mines that floated on the surface which were detonated by being struck by a ship. Observers in the command station knew the precise location of each mine planted so that, if an unidentified vessel attempted to enter the channel, the mines under the ship could be detonated

To your right is a large concrete building that now serves as the foundation of a modern house. This is a mine casemate, a heavily reinforced concrete building from which the mine field in Hussey Sound was controlled. The building was poison gas proof and had its own electrical power plant. In the interior was a plotting room with a plotting board upon which the locations of all the mines were indicated. If an unidentified vessel entered Hussey Sound, its course and speed would be plotted, based on data telephoned in from the Mine Command Station and another mine observation station on Long Island. If the Mine Commander ordered a mine to be detonated, a person in an operating room in the building would flip a switch, exploding the mine. The operator could also set the mine field on "signal," meaning it would indicate the presence of a ship, or "contact." This meant a mine would explode if disturbed by a ship. Early in the war, floating mines were planted, but later these were replaced with magnetic ground mines, which sat on the bottom and would explode if they detected the presence of a metal hull.

Continue walking past the mine casemate building along Seashore Avenue about 600 ft. to the intersection of Virginia Avenue, marked by two trees with the orange trailblazer paint. Virginia Avenue is a lovely 1 mile walk through what had been Blackman's Farm before the war. It is not passable by car. For nearly 50 years the farm provided most of the fruits and vegetables consumed by islanders. You will exit Virginia Avenue in Blackman's apple orchard at the intersection of Massachusetts and Central Avenues. Bear to the right onto Central Avenue to Site 12, near a small yellow concrete building. Your path is marked by orange dots on the trees. Site Twelve: Just above the small, concrete building on your left on Central Avenue.



The disappearing spotlight National Archives photo

This small, concrete building is a searchlight power house built in 1920. Inside were two gasoline engines driving generators which supplied the electricity to operate the searchlight located just above the power house. The searchlight, which was mounted on the concrete base, was a "disappearing" model. It was located on a steel tower that was counterweighted, allowing the tower to lean all the way over if the counterweights were repositioned, thus making it invisible to an enemy vessel. Searchlights were necessary to locate vessels at night, and used particularly to watch for small vessels, such as mine sweepers and torpedo boats. During World War II the disappearing searchlights were replaced by modern mobile units with portable power plants.



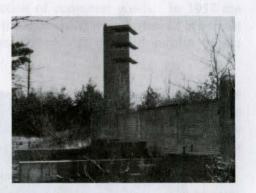
The disappearing spotlight at rest National Archives photo

Continue a short distance on Central Avenue to Site 13.

Site Thirteen: About 50 feet beyond the searchlight on Central Avenue

On your left you will see the concrete foundation of a building with large concrete columns on the south side. This was the site of a wood frame, stucco observation station built in 1920 but used through World War II as a command station. On each of the concrete columns was mounted an iron base with a large telescope on top. These telescopes were depression position finders which gave the direction and range to a target.

During the war the army built two new, 5-story, concrete, observation towers. One can be seen to the right of the 1920 station. The new towers were higher so that observers, using high-powered telescopes, could see greater distances. The greater number of levels also allowed for each level to serve more than one function. One of the levels served as the commander's station for Battery Cravens. Adjacent to the first



Observation tower behind command post K. MacIsaac photo

tower were two barracks to house the men assigned to the observation stations. Three nearby cottages were also leased by the army for housing.



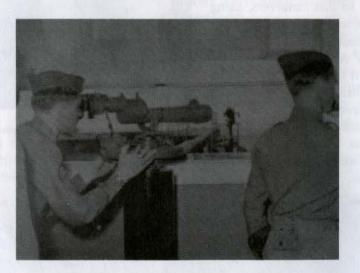
Please do not try to enter this building. There are no stairs beyond the second level.

Return to Central Avenue, turn left, and follow the orange dots to Site 14, which will be on your left

Command post • K. MacIsaac photo

Site Fourteen: In front of the western observation tower on Central Avenue

Look up the hill and you will see the second of the two World War II observation towers. One of the levels in this tower served as the commander's station for Battery Steele, and another as a group command station. Small stoves heated the rooms in the towers, but it was necessary to open the windows when taking sightings on a target. This tower is currently being used by Time Warner Cable Company to deliver television programming to the island from the mainland via a microwave dish mounted on top of the tower.



Soldiers in the observation tower fifth maine collection

Conclusion

At the time the Peaks Island Military Reservation was created, the army assumed these gun batteries would continue to defend Portland Harbor for a generation, as had earlier fortifications. However, the rapid advances in technology and tactics during World War II, such as aircraft, missiles, atomic weapons and amphibious landings, made fixed harbor defenses obsolete. After 1948, the 90 and 40 millimeter guns, generators, and radar were removed. The large 16" and 6" guns were cut up and shipped to Bethlehem Steel Company in Pennsylvania where the pieces were melted down and reused in the production of consumer goods. In 1957 the remaining wooden buildings on the reservation were destroyed in a forest fire. At the same time, the reservation was declared surplus by the government and offered for sale.

Approximately 114 acres are currently owned by and designated as parkland by the City of Portland. The Peaks Island Land Preserve holds conservation easements on 98 of those acres, thus ensuring that the area will remain open space for the enjoyment of the public. The remainder is privately owned.

We hope you have enjoyed your guided tour of the Peaks Island Military Reservation. For further information about World War II on Peaks Island and in Casco Bay, visit the Fifth Maine Regiment Community Center's World War II room or consult the references listed at the back of the guide.

From this point you may continue on Central Avenue to reach the harbor side of the island where the ferry landing is located. At the end of Central Avenue, turn left to reach the Fifth Maine, shops, restaurants, and the ferry landing.

You have now reached the end of the trail.

For Further Reading

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