

Sponsored by the Edgemere Sparrows Point Recreation Council

**USE YOUR
SMARTPHONE OR
TABLET TO ACCESS
THE**

Do It Yourself Tour Guide

for the

**Historic Coast Artillery
Batteries at Fort Howard Park**

See the instructions below.

Step 1: ACCESS THE TOUR GUIDE

You may access the tour guide in two different ways.

A. Use your smartphone or tablet to access the page that includes the Do-It-Yourself (DIY) Tour Guide document at

<http://www.esprec.com/site/ClientSite/article/1870258>

B. Use the QR Code posted on the bulletin board to go to the page that includes the DIY Tour Guide. The QR Code is also displayed on the Tour Station Markers throughout the park.

The DIY Tour Guide includes information about each of the historic sites in the park and directions on how to get to each one.

Step 2: START AT THE BULLETIN BOARD

You will start your tour at the bulletin board in the parking lot at Fort Howard Park. Next to the bulletin board you will see a wooden station marker. This marker displays the crossed cannon insignia of the Coast Artillery Corps and the numeral 1. This marker identifies Station 1 of the tour.

Step 3: SCROLL TO STATION 1

When you are ready to begin the tour scroll down in the DIY Tour Guide to the section titled "Station 1." Read the information for Station 1 and then follow the directions to find your way to Station 2.

Step 4: COAST ARTILLERY INSIGNIA STATION MARKERS

Coast Artillery Insignia Station Markers are displayed throughout the park. The number on each marker corresponds to a section in the DIY Tour Guide.

Step 5: LEARN ABOUT FORT HOWARD

You are on your way. When you arrive at Station 2, scroll to that number in the guide and read about the history at that site. Continue to follow the directions and learn about all eleven of the historic sites around the park.

STATION 1

Read the large brown poster on the bulletin board titled "Fort Howard: The Bulldog at Baltimore's Gate." The poster explains why and when the fort was built and includes pictures of the types of guns that were located here.

(Directions to Station 2: From the bulletin board proceed to your left into the park. The Station 2 marker is on the left just past where the roads cross.)

STATION 2

Read the three historical signs on the way up the hill. These signs describe life at Fort Howard during the forty years it was an operating army installation.

(Directions to Station 3: After you read the third historical sign walk up the hill to the Fort Howard Park sign, turn left, and walk straight to the Station 3 marker on the left.)

STATION 3

This concrete structure is Battery Clagett. Read the historical sign to learn about the guns that were once mounted here.

When you finish reading, walk up to the top of the battery and find the circular platforms where the guns were located. Remember that the trees in front of the battery were not there when the fort was operational; therefore, the gunners would have had a clear view down the bay and of the entrance to Shallow Creek to the left.

Originally, there was another similar three-inch battery at the other end of the gun line near Battery Nicholson. It was named Battery Lazear. That battery was removed soon after the VA hospital was built in 1940.

(Directions to Station 4: Proceed on the paved path around the corner and locate the Station 4 marker on your right.)

STATION 4

Directly behind the Station 4 marker you can see a large odd looking concrete building. Here is a picture of it from 1923.



Civilian employees who worked for the fort's military engineers were quartered in this building. These civilian employees were hired as contractors to construct new buildings and make improvements to existing structures. We are still researching why they were housed so far away from the garrison area where the soldiers lived.

On the right side of the Engineer's Employees Quarters, you will find the remains of two more structures. Inside the chain link fence is Building 126. This was the kitchen and dining area for the civilian employees. Below is a picture of it from 1923.



Beyond the kitchen building, there is a large flat platform with a concrete cylinder in the middle. This is the foundation of the Fire Command Tower. See the picture below.



This tower was the communication hub for the entire harbor defense when the big guns were in action. Overall control of the guns and underwater mines would have come from here. The officers and soldiers in this tower were linked by telephone to all fire control stations and gun batteries at all four forts on the Patapsco River.

Finally, move to other side of the Engineer's Employees Quarters, and you will find another large, flat platform with a concrete cylinder in the middle. This platform is the foundation of one of the Base End Station towers that housed communication equipment and optical devices called Azimuth Instruments (a type of telescope).

In case of attack by enemy ships, the soldiers in the Base End towers would have used that equipment to target the fire of the big guns housed here and at the other three forts on the Patapsco River.

The equipment and the soldiers who operated it were located in the wooden structures at the top of the sixty-foot towers. From up there, they had a clear view of the Chesapeake Bay and the Patapsco River. See the picture below.

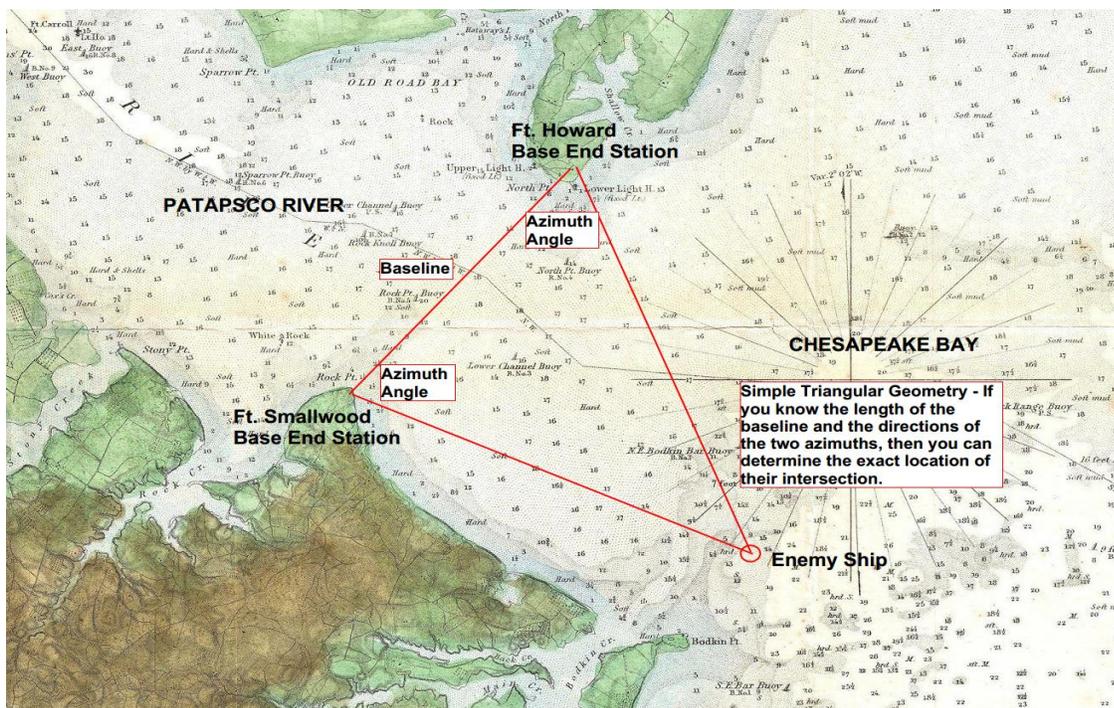


The Azimuth Instruments were used to determine the “bearing” (angle) to any enemy ship in the bay or in the Patapsco River shipping channel. The soldiers in this tower and those in a second Base End Station across the river at Fort Smallwood would take bearing measurements simultaneously. See the picture below.



USING TRIANGULATION TO TARGET ENEMY SHIPS

The second Base End Station at Fort Smallwood was exactly 5499 yards from the station here at Fort Howard. That exact distance is called the baseline. Using that distance and the two azimuth bearings (angles) to the enemy ship, the position of that ship could be determined. See the triangle formed on the map below.



The bearing measurements were relayed to a plotting room where they were used to determine the present position and to predict a future position of the targeted ship.

The estimated future position of the enemy ship is where the ship would be in a certain number of seconds if it kept moving forward at the same speed and in the same direction. The number of seconds was determined by how long it took the gun crews to aim the guns, fire them, and for the shells to reach the target.

That future position is the location targeted by the guns.

This process of locating, future position targeting and firing was repeated until the enemy ship was damaged or sunk.

Take a few minutes to explore the remains of these four buildings.

(Directions to Station 5: Proceed on the paved path and watch for an historical sign on your left. This sign describes a time in the 1960s when there was a Vietnamese Village at Fort Howard. When you finish reading, walk down toward the restrooms and locate the Station 5 marker on your right.)

STATION 5

Read the historical sign about underwater mines in the Patapsco River, and then walk around behind the concrete structure covered by dirt and trees. This structure is the mine casemate. The building whose foundation is behind the casemate also housed mine equipment and control panels.

Just past the restrooms you will find another historical sign that tells about the eight huge mortars of Battery Key.

When you finish reading, walk into the giant, horseshoe-shaped battery pit. Look for the four circles on the ground where the mortars were mounted.

(Directions to Station 6: Walk away from the restrooms toward the small red ticket booth. The Station 6 marker is past the booth on the left.)

STATION 6

Look through the fence, and you will see the “garrison” area of Fort Howard where the soldiers lived. The barracks, mess halls, headquarters, post-exchange, officer’s quarters, and parade grounds were located there. This is a picture of the garrison area circa 1907.



The army moved out of the fort in 1940, and the property was transferred to the Veterans Administration. The large multi-story brick building in the center of the garrison area

is the Veterans Administration Hospital. It was completed in 1943 and was in operation until 2002.

Long before Fort Howard was built, another very important historical event happened near here. About a mile north of the garrison area, 4000 British troops came ashore on September 12, 1814, intending to attack and burn Baltimore. They marched up North Point Road and were met by 2500 American militiamen about five miles north of here. The engagement that ensued is known as the Battle of North Point.

(Directions to Station 7: Walk down the paved path along the fence. Look through the fence to the right, and you will see a long, low brick building. This building is the mine storage and maintenance building. It was built in 1907 and housed the electrically controlled underwater mines that were placed across the Patapsco River to protect Baltimore Harbor from incursions by enemy naval vessels. The Station 7 marker is at the next corner.)

STATION 7

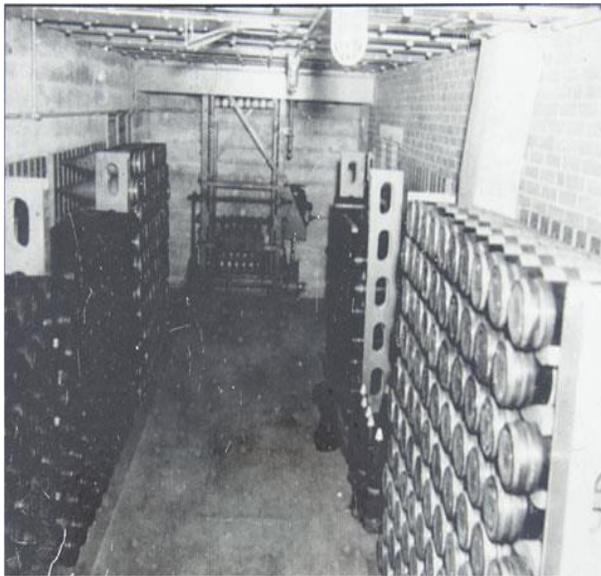
This large concrete structure is Battery Nicholson. Battery Nicholson was a reinforced concrete six-inch gun battery with two rifled guns mounted on disappearing carriages. The two guns were located on the top of the structure.

Look through the bars on the windows. The rooms inside the gun battery had various purposes.

They housed



target plotting boards



ammunition storage



electrical generators

In addition, the building housed other facilities that had to be protected by thick concrete from bombardment by enemy ships.

The next station is located at the entrance to the gun platform on top of Battery Nicholson. You will see where the guns were emplaced.

(Directions to Station 8: Walk to the next corner and turn right up the hill. You will see the Station 8 sign on the left.)

STATION 8

Read the historical sign about Battery Nicholson, and then walk up the wooded path behind the sign to the top of the battery. Go around to the steps on your right, and walk down to the gun platform. The large semi-circle depression to the left is where one of the six-inch disappearing rifled guns was mounted.

You can walk around the battery to the other side to see the second gun emplacement. On your left as you walk, you will see two platforms and openings in the wall. These were the hoist tunnels where the shells and powder were brought up from the storage areas below.

(Directions to Station 9: Walk back up the steps and off the battery. Proceed to your right on the paved road, and locate the Station 9 marker on your left.)

STATION 9

Read the historical sign about Battery Stricker, and then walk up the wooded path to your right. This is the entrance to the top of Battery Stricker. Look over the fence in front of you. The large, semi-circle depression is where one of the guns was mounted.

Now, move to your right along the fence. Go around the corner until you come to a flight of metal stairs. Descend to the bottom, and turn right at the corner. Walk through the empty room to see the other twelve-inch gun emplacement. As you pass out of the small room, you will see a large opening in the wall. In this opening a hoist moved shells and powder up from the storage areas inside the battery.

(Directions to Station 10: Walk back up the steps and off the battery. Proceed to your left on the paved road, and locate the Station 10 marker on your right.)

STATION 10

Read the historical sign about Battery Harris and the Coincidence Range Finder.

(Directions to Station 11: Continue along the paved path past the pavilion. Watch for the Station 11 marker on your right.)

STATION 11

Read the historical sign about the Artillery District of Baltimore and the Spanish – American War.

You have completed the DIY Tour of the historic Fort Howard gun batteries. Thank you for taking the time to learn about the fascinating history of coast defense here at the fort. Please tell others about this tour.

You can learn more about historic Fort Howard on the Friends of Fort Howard Park website at

<http://www.esprec.com/site/ClientSite/article/1870258>

and on our Facebook page at

<https://www.facebook.com/FriendsOfFortHoward>