## Sandy Hook Proving Ground Test Site for 14-inch gun turrets

In January 2016, members of the Army Ground Forces Association (AGFA) met with National Park Service site coordinator Pete McCarthy to plan a "NPS Centennial Project". Mike Murray, Board Member of Army Ground Forces Association (AGFA) recommended we remove the vegetation that totally covered the 1916 Turret Test Block at the former Sandy Hook Proving Ground.

These two twin 14-inch M1909 gun turrets were destined to equip Fort Drum in Manila Bay. They were installed in 1917 and the fort was put in the hands of the Coast Artillery in 1919. The fort was armed with four 14-inch M1909 guns in two turrets of Army design; four M1908 6-inch guns in two stacked casemates on each side of the fort; two M1917 3-inch anti-aircraft guns mounted on top of the fort. A tall cage mast with fire control instruments completed the look that gave it the name "The Concrete Battleship". The fort consisted of all elements required for operations to include barracks, power generation, water desalinization, medical and food service. The fort was manned by a garrison of approximately 300 men. The walls and ceiling were over 30 feet thick reinforced concrete which created a nearly impregnable fortress. Under constant attack by the Japanese beginning 8 December 1941, the fortress's 14-inch guns were the last operations weapons in the defenses when surrender on 5 May 1942.

The photos below show the site essentially covered in trees and vegetation. The picture on the left shows Board Member Mike Murray. Notice the large bolts to the right and the large plate behind him. The photo to the right demonstrates the thickness of the covering vegetation. There were approximately six large trees, and many smaller bushes around the site. A thick vegetative mat about two inches thick covered the majority of the concrete structure. The clearing effort took over 300 working hours to complete. Work was conducted between January and September 2016.



The photos below show the first few days of work in January and February 2016. To the left is Richard King after having cut a large tree. On the right are four AGFA members clearing out the cut trees. The February had significant snow and we had to wait a few days before we could clear out trees.





The two photos below show AGFA members (left to right) Richard King, Paul Taylor, Bill Winslow, our guest Tom Evans, and Pete McCarthy, the Sandy Hook Unit coordinator. The photo at left shows Shawn Welch standing on the metal plate with saw in hand...



By early March, most all of the trees and bushes were cut and we were left with the thick vegetative mat and the center depression full of roots and other debris. This took about six additional days to clear. The picture on the left shows the plate in the rear and part of a row of bolts. The center area is completely filled in. The picture on the right is from late April and shows the entire site cleared and the center pit opened.



The photo below shows the entire block site cleared and rust converter applied to all bolts in late August 2016. Clearing the site revealed not only the main block, but also a secondary rectangular block and two other small blocks adjacent to the large block. As part of the project, all exposed metal parts and bolts had rust converting protective coating applied. The large plate in the right side photo will be treated in the near future.



The pictures below was taken on 18 September 2016. On this day the National Park Service and AGFA dedicated the work to the Centennial of the National Park Service.



In September the National Park Service further cleared the site, spread mastic and wood chips and installed the two wayside signs that were purchased using a donation from the Coast Defense Study Group. The AGFA members below with Rangers Jen Cox and Pete McCarthy (Fort Hancock/Sandy Hook Unit Manager) were very happy with the outcome of the project.



The pictures below shows one of the two M1909 14-inch gun turrets installed at the test block. The nearest gun us shown at maximum elevation of 15 degrees for a maximum range of 19,000 yards firing a 1,660 pound armor piercing shell.



The color photo below was taken in 1941 and shows the two 14-inch gun turrets of Fort Drum as well as the large cage mast. In early 1942 the wooden buildings and the cage mast were disassembled and pushed over the side of the fort to enable the top 14-inch gun turret, "Battery Wilson" to fire in a 360 degree arch (all-round fire).

