Coast Artillery Living History
Ft. Mott, NJ

On 17-18 July 2010, Fort Mott State Park hosted a timeline living history event supported by the Army Ground Forces Association (AGFA). In addition to AGFA, there were several other living history and reenacting groups that covered time periods from the Revolutionary War to the Cold War in the early 1950’s.

The members of AGFA who participated in the event were Kieren Fletcher, Andy Grant, CJ Gutch, Doug Houck, Anne Lutkenhouse, Eric Meiselman, Tom Minton, Mike Murray, Paul Taylor, Luis Ramos, Joe Rosamilia, Stephen Turner, Vincent Turner, Gary Weaver, Shawn Welch, Larry Winchell and our guest Travis Mable.

The educational objective for AGFA was to provide interpretation of the Coast Artillery mission at Fort Mott at the outbreak of World War Two with a focus on the fire control system emphasizing the G1 tower, Battery Commander’s station for Battery Arnold, munitions and medical displays and a plotting room display. AGFA members also interpreted the Coast Artillery at the dawn of the 20th Century as well as the United States Army during the Korean War era as well.

The photo below shows the participating membership from AGFA and other groups on Saturday 17 July.
On Friday 16 July, several members took a short ferry trip to Fort Delaware, which is located on Pea Patch Island in the middle of the Delaware River, directly between between Fort Mott, NJ and Ft. DuPont, Delaware. These three forts presented a veritable wall of defenses across the river. The fort, made of granite block, was constructed in the 1840’s and is pictured below. It is part of what is referred to as America’s “Third System” of coastal fortifications, which were built around major American harbors between 1816 and 1867. The fort has been well preserved, and is now open as a museum under the stewardship of the Delaware State Parks System. Inside the masonry fort walls is a circa 1900’s three-story 12-inch Disappearing Gun Emplacement – Battery Torbert. Like many “Third System” forts, Fort Delaware received modernizations during the “Endicott” era of harbor fortifications in the late 1890’s, when the Army began to build its gun emplacements with reinforced concrete.

The landing for the ferry is at the end of the road pictured below. Directly to the side of this road is a fire control station for Battery Torbert. This station was restored several years ago by AGFA members Curtis Saunders and Peter Morrill on behalf of the Delaware Parks system.
There are many interesting artifacts that can be seen within Fort Delaware and Battery Torbert. Battery Torbert’s power generation system is still partially in existence. The frames of the General Electric generators and other mounting parts are still present.

Below, the three-story back façade of Battery Torbert looms large inside the old masonry fort. It’s massive size, much larger than most gun batteries of its era, is due to its unique design. Battery Torbert was originally slated to become a “Lift Gun Battery,” identical in design to the 12” rifles mounted on steam-powered hydraulic elevators mounted inside of Battery Potter at Fort Hancock, NJ. The structure needed to be of such size so it could house the massive steam machinery needed to operate the elevators and loading mechanism. As the general design for such a system was found to be obsolete before Battery Torbert was completed, it was converted to mount three 12” rifles on conventional counter-weight or “disappearing” carriages.
Inside Fort Delaware are three large barracks buildings, dating to the Civil War era. These buildings housed Coast Artillery soldiers from the 1860’s to the 1940’s. Graffiti from soldiers of the 21st Coast Artillery dating from 1941-42 is still present inside the upper floor barracks rooms.

There is only one physical entrance, and it is located on the fort’s western side, facing towards Delaware. Called a “sally port,” it is seen in this photo. Note the Columbiad cannon mounted on the upper tier. The fort once boasted many examples of this type of cannon.
Back at Fort Mott, activity swirled as materials were moved from site to site in preparation for the event. Here, SGT Turner drives Fort Mott’s vintage 1940 Dodge Truck, which was the “prime mover” for the event.

Below SGT Turner takes a break behind the Battery Arnold Commander’s Station with Jessica Dougan dressed in period attire.
AGFA members were not the only ones busy setting up displays. Seen below are photos of the other groups that participated in the event. One of the groups attending the event provided a display of Civil War naval materials.

Other unique and interesting Civil War naval artifacts were also on display on the table below.
In the picture below, The MacMullen’s portray Coast Artillery personnel from the Spanish American War period (1890s). Soldiers stationed at Fort Mott in this time period would have worn similar uniforms,

AGFA member Gary Weaver switches gears to portray a sailor onboard the USS Lehigh – a Union monitor that served with distinction in the Civil War through to the Spanish American War. It was scrapped in 1901.
However, most of SSG Weaver’s time was spent in the casemate of Battery Edwards. This battery is unique, as it is the only casemated 3” gun battery ever built in the United States. SSG Weaver’s focus was to provide instruction to the public on the various types of munitions that were deployed and used at Ft. Mott during its active life.

The photo below provides another view of the munitions. These include 3 to 10-inch projectiles, fuses and primers. Each shell and cartridge presents a specific use, as the Coast Artillery was an extremely dynamic force, capable of defending attacks from the sea and sky – simultaneously, as needed.
While SSG Weaver was at the munitions display, 1st Sgt Murray and Recruit Maple manned the Battery Arnold Battery Commander’s, or “BC” Station. It was from this location that the officer commanding Battery Arnold’s massive three 12” rifles – which could hurl 870 pound projectiles down the river at the rate of six per minute – would coordinate the targeting and operations of the guns. The station could also operate as an auxiliary fire control (spotting) station.

A full view of the station is provided below, with LTC Welch donning a vintage and fully operational EE-70 head telephone inside the station. The Delaware River is directly in front, roughly 200 feet away. This BC station reflects the constant shift in technology with the Coast Artillery. The round edge of the wall is not a decorative feature; this is in fact a former gun position. Battery Krayenbuhl was armed with 5” guns on telescoping pedestal mounts. Removed due to obsolescence in 1917, the open pit was converted to a BC Station in 1922.
Along the main gun line, and directly next to Battery Arnold, is the former switchboard room. Here, 2LT Lutkenhouse manned a medical interpretive station. In the photo below 2LT Lutkenhouse and 1st Sgt Murray pose in front of some of the displays.

Additional displays are in the photo below.
In order to get to the plotting room in Battery Edwards’ Emplacement #1, the public had to travel through the same service tunnel used by Fort Mott’s troops so long ago. It is seen here, pictured below.

Their walk was rewarded with the interpretation provided by PFC Ramos pictured below. He is seated behind the plotting board just after setting up some of the EE-91 telephones.
The plotting board with the four EE-91 telephones and Time Interval bell are pictured below.

Below, SGT Turner and Jessica Dougan present another wonderful “period correct” shot with the 1940 Dodge, located just behind the Fort’s Headquarters building. Note also the new wood frame on the truck’s bed; AGFA members and Fort Mott State Park Staff are working diligently to restore the vehicle to a more authentic look.
In the photo below, CPL Turner, is dressed in a 1902 Coast Artillery uniform, stands outside the medical station with PFC Ramos and 2LT Lutkenhouse.

Standing approximately 50 feet tall, the G1 Tower has a commanding view of the engagement area, located down river to the south, where an enemy force would have to come from. The senior officers and soldiers in this tower would have coordinated the firing of several gun batteries, giving fire missions to specific gun batteries for individual enemy ships as they came up the river and within range. Below, CPL Winchell provides information to the public in the G1 tower. This tower was restored in 1997 by the State of New Jersey.
Inside the G1 tower are some of the older fire control telephones in the Ft. Mott/AGFA collection, and again, these reflect the technological changes that the Coast Artillery heralded within the telecommunications field over several decades. On the left is an EE-71 from 1920 and on the right is a EE-31 from 1917. All fire control phones at Ft. Mott are operational.

The photo below shows our oldest operational phone, a EE-27 from about 1910.
In the photo below, LTC Welch stands beside the EE-71 in the G1 tower.

In the photo below, SSG Houck, in a Korean War-era uniform stands in front of a Civil War-era display with Ft Mott’s 12 pound Napoleon cannon. The Cannon is unique, as it has been at Fort Mott for many years and is over 160 years old. The weapon was fired later that evening. According to The Civil War Store, this brass cannon was developed by Emperor Napoleon III of France in the 1850’s. This weapon made its way into the United States in 1857.
Below, the Ft. Mott Napoleon cannon speaks!

After firing, the gun is cleaned and prepared for the next round. All cannoneers are ‘certified’ to work with black powder propellant for these cannon by participating in rigorous training administered by trained professionals as a condition of the organization’s liability insurance. Below, Civil War and Revolutionary War living historians participate on the cannon firing detail.
As always, the biggest draw was the 1942 60" Sperry 800-million candle-power search light. This type of light, along with counterparts made by General Electric, was used both for Anti-Aircraft and Seacoast Artillery fire control. The light beam can reach for 5 miles, providing a stunning visual presentation.

The photo below shows another view of the searchlight.
The intensity of the light is so powerful that looking directly into the light can result in burning of the retina of the eye. The flame from the carbon arc is visible in the photo below. The principles which cause the light to engage operate much like an arc welder. The light is reflected from a 5-foot diameter concave mirror and projected outward.

The searchlight is shown below with its light extinguished. The mirror is much more evident in this shot. These lights burn with such intensity that the parts begin to glow red from the heat and must be allowed an extended period of time to cool off after each use.
On Sunday, CPL Minton and Recruit Maple manned the plotting room inside Battery Edwards.

Below, PVT Rosamilia stands next to the M1910A1 azimuth instrument inside the Battery Commander's station.
During the afternoon, PFC Ramos came out of the plotting room to get some fresh air and escape the voracious mosquitoes— as murderous today as they were a century ago.

Below, SSG Houck provides information to visitors at his station. Interpreting the Korean War of 1950-53, the US Army equipment seen on the table hadn’t changed all that much in the five years since WWII came to an end. In fact, most troops went into battle with WWI and WWII dated equipment hastily pulled from storage.
As the day draws to an end, and another event comes to a successful conclusion, 1LT Grant, also in Korean War-era uniform, contemplates the next event at Fort Mott.

For more information, visit the Army Ground Forces Association Website http://armygrounforces.org