

Coast Artillery Living History
Fort Hancock, NJ

On 17 & 19 May 2024, the National Park Service (NPS) conducted the annual spring Coast Defense and Ocean Fun Day event (sponsored by New Jersey Sea Grant Consortium (<http://njseagrant.org/>) in conjunction with the Army Ground Forces Association (AGFA). Coast Defense Day showcases Fort Hancock's rich military heritage thru tours and programs at various locations throughout Fort Hancock which occupies the Sandy Hook peninsula. The entire peninsula is designated "The Fort Hancock and Sandy Hook Proving Ground National Historic Landmark District".

The educational objective was to provide interpretation of the Coast Artillery mission at Fort Hancock in the World War Two-era, focusing on May 1943.

The members of AGFA who participated over the three days were Jacob Ansley, Callum Bujdos, Donna Cusano, Paul Cusano, Gus Filippelli, Joel Gonzalez, Richard King, Henry and Mary Komorowski, Noah LeBlanc, Anne Lutkenhouse, Joe McCoy, Tom Morrison, Mike Murray, Jerry Still, Paul Taylor, John Uhler, Gary and Deanna Weaver, Shawn Welch and our guest Larry Mihlon with his 1938 Plymouth.

AGFA focused on the activation of two 6-inch M1900 barbette carriage guns at New Battery Peck (formerly Battery Gunnison). The battery structure was reconstructed between March and May 1943. Gun #1 arrived on 8 April and Gun #2 arrived on 21 May. Beginning in April 1943, Battery Gunnison transformed into Battery Peck.

The tactical focus of the event was the ongoing U-Boat war, and the threat of saboteur activity or the shelling of Fort Hancock by submarines using deck guns. The event also addressed the operation of the Advance Harbor Entrance Control Post ("HECP") Number 1, which was located at Fort Hancock, and the role that Battery Peck played as Advance HECP #1's Examination Battery.

The photo below from Sunday 19 May shows that day's participants in front of the machine shop and magazine door areas.



AGFA has continued its work of restoration at Battery Gunnison/New Battery Peck. Selected restoration reports are available on the AGFA website in PDF article format at <http://armygroundforces.org/restoration.html>. Significant milestones as of May 2024 include

- A) All major restoration components for the M1900 6-inch seacoast rifles are now complete. Both guns have all on-carriage systems restored and functional. The final component restorations were the M1904 telescopic sight cradles. Gun #2's was finished in October 2023. Gun #1's cradle was installed in April 2024 and its first interpretive use was May 2024.
- B) In 2015, during the electrification project for Battery Gunnison/New Battery Peck, AGFA informed the NPS that within the program of restoring Corps of Engineers 1915 standard Coast Artillery electrical components, enough material was on hand for installation within the Mortar Battery. The Mortar Battery served as the Headquarters for the Harbor Defenses of New York from 1940 to 1949. From 2020 forward, the structure has been open to vandalism. This condition made any work within the structure unrealistic. In August 2023, AGFA proposed to the NPS a project to secure the structure from unauthorized entry. That phase was completed in April 2024. This involved fabrication of three steel window closures and one large bar door and frame. The large bar door was a station visited during the Friday 17 May "Lantern Tour" and photos are shown later in this article.
- C) AGFA has continued work to restore the twelve platform lights recovered from 9-gun battery in 2018-2021. Originally these twelve lights were to be restored and put in storage. Since inception this project has evolved into a proposal to the NPS to re-install them on 9-gun Battery (specifically Batteries Richardson and Bloomfield) using a solar powered low-voltage battery system to provide lighting daily from early evening until the nighttime closure of the park. This proposal is in development as restoration of the 12 lights continues. Historic standards compliance review is ongoing and the restoration of the lights will likely take another six to twelve months.

While the major components of the M1900 6-inch rifles are now completed, there are two remaining "attachments" that need to be fabricated to enable BOTH guns to be fully interpreted at the same time. A second replica (non-firing) M1900 firing device and a second azimuth indicator are required. The azimuth indicator is in fabrication. The second M1900 firing device replica (non-firing) is awaiting a future effort.

The securing of the Mortar Battery/HDCP (Harbor Defense Command Post) was the first step to a much larger project. The next two phases are National Park Service specific - (1) clearing the two main ventilation shafts and installing a fan on each and (2) re-introducing electrical service within the Mortar Battery. Once those two are completed, AGFA will begin the process of installing electrical systems, telephone systems and general headquarters furnishings. This is about a five-year project with projected completion of 2030.

Additional work has been undertaken on fire control instruments within the plotting room of Battery Gunnison/New Battery Peck. The latest effort is properly finishing the M3 Plotting Board station arms. We had fabricated two station arms in the 2015-16 timeframe. They are constructed from brass and were engraved with a 1-inch equals 500 yards scale. However, they lacked the actual appearance of the original manufactured arms.

Several years ago, AGFA purchased a metal blackening kit. This kit was designed to blacken most ferrous metals - to include brass. The photo below shows the reproduction M3 Plotting Board station arms (black) and gun arm (aluminum) on Sunday 19 May. The blackening project was undertaken by LTC Welch and T-5 Morrison in March and April 2024.



The photo below gives a better view of the blackening, engraving and whitening of the lettering and scale on a station arm and the "coupler" that connects the station arm to the azimuth data box on the plotting board azimuth ring. This converts the azimuth from the station arm azimuth to an azimuth aligned with the gun arm (gun directing point).



Friday morning was the start of preparations for the event weekend. Below members are preparing field equipment for the weekend.



Below members are preparing Gun #1 for the Friday evening lantern tour. Loading implements, tools and components for the gun are assembled on the gun platform. The gun pointer's telephone is in the process of being connected.



The photo below show the Chaplain's exhibit as established on the Gun #1 side of the powder magazine.



Below is another view of the Chaplain's exhibit along the right (eastern) side of the powder magazine.



Medical exhibits were established in the mechanical room. Originally this room was home to an Arcola Boiler (for radiator heat in the plotting room) and the Chemical Warfare M1A1 Collective Protector.



Below is a portion of the medical exhibit which is focused on blood pressure, resuscitation and stopping severe blood loss.



Two separate views of the medical exhibits are below.



Below on the left is a medical anesthesia equipment box. The large pipes are part of the M1A1 Collective Protector (gas filtration and decontamination system).



Below is an X-Ray film to show how WWII X-Ray films were used for diagnosis.



On the right is a 1943 Picker field X-Ray machine for use in Battalion and higher medical stations in a tactical environment. On the left are two non-combatant gas masks hanging on the air lock door for the decontamination chamber.



The chart on the wall is a detailed description of all the various chemical agents, their effects on humans, how to identify them, to protect from them, and decontamination methods.



As similar chart is posted inside the decontamination air lock as shown below. Both of these charts are new exhibits and provide detail on chemical agents.

U.S.A. SYMBOL	NAME	ODOR	COLOR & STATE	PER. DIL. ENCL.	PROTECT. TIME	PHYSIC. TEST	FIRST AID
GASEOUS AGENTS	H MUSTARD	Garlic, Mustard-like	Liquid, colorless, heavy	1000	10 min.	None	Blot off excess. Do protective treatment. Wash with soap and water.
	L LEWISITE	Garlic-like	Liquid, colorless, heavy	1000	10 min.	None	Wash with soap and water. Single eye will wash from contact.
	ED ETHYL CHLORIDE	Strong Chloroform-like odor	Liquid, colorless, heavy	1000	10 min.	None	Eye: Wash with 1% solution of sodium bicarbonate. E: In case eye is not washed.
	PS PHOSGENE	Musty, Rye Grass, Corn, Straw-like	Liquid, colorless, heavy	1000	10 min.	None	Eye: Wash with 1% solution of sodium bicarbonate. E: In case eye is not washed.
LIQUID AGENTS	CNS CHLORACETOPHENONE	None	Liquid, colorless, heavy	1000	10 min.	None	Wash eye with water from contact.
	CNB CHLOROBENZENE	None	Liquid, colorless, heavy	1000	10 min.	None	Wash eye with soap and water.
	DN DIPHOSPHORUS	None	Liquid, colorless, heavy	1000	10 min.	None	Wash eye with soap and water.
	BBC BIPHENYL CYANIDE	None	Liquid, colorless, heavy	1000	10 min.	None	Wash eye with soap and water.
SOLID AGENTS	DM ARSINIC ACID	None	Solid, colorless, heavy	1000	10 min.	None	Wash eye with soap and water.
	HC HYDROCYANIC ACID	None	Solid, colorless, heavy	1000	10 min.	None	Wash eye with soap and water.
	FS FOSPHORIC ACID	None	Solid, colorless, heavy	1000	10 min.	None	Wash eye with soap and water.
	FM FOSPHORIC ACID	None	Solid, colorless, heavy	1000	10 min.	None	Wash eye with soap and water.
MICROBIALS	TH TETRAHYDROTHIOPHANE	None	Solid, colorless, heavy	1000	10 min.	None	Wash eye with soap and water.
	TH THIOUREA	None	Solid, colorless, heavy	1000	10 min.	None	Wash eye with soap and water.

Below is a display of various types of Coast Artillery ammunition. From left to right is a board of sectionalized fuses from 1920, a 75mm shell with point detonating fuse (French used by US), two 3-inch armor piercing shells, an M1918 3-inch Anti-Aircraft shell with time fuse projectile, a M1903/M1917 3-inch shell for use against both aircraft and ships (it also has a high explosive shell with time fuse) and a 90mm dual purpose (ship/aircraft) shell.



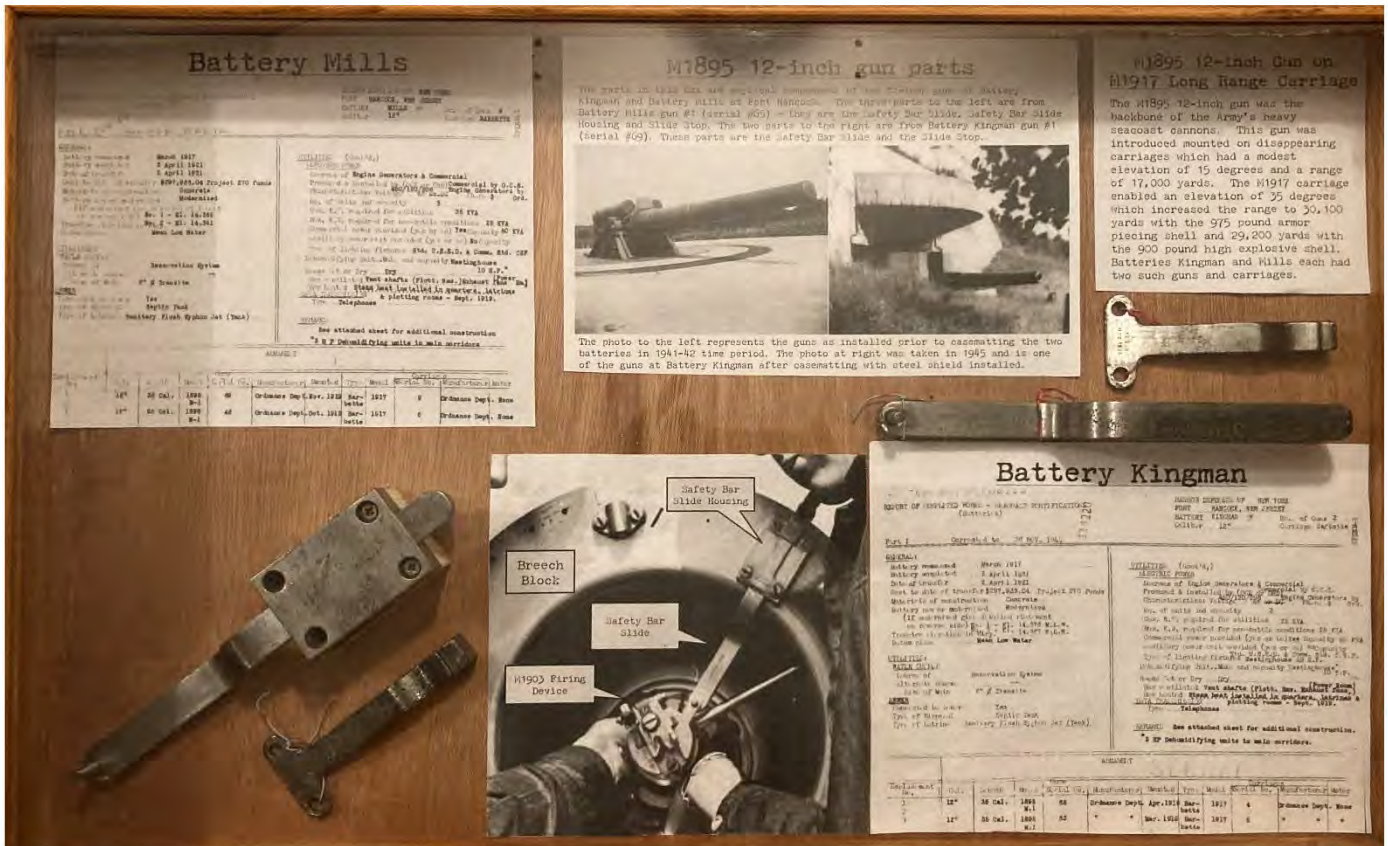
The large yellow shell is a replica 16-inch Mk-12 Armor Piercing shell and one of six powder bags to propel it. The grey painted munitions are all inert chemical warfare and are (left-right) 3-inch field gun, 75mm pack howitzer, 155mm shell, mustard gas mine (looks like a paint thinner can) and a 100-pound air dropped chemical bomb.



The photo below shows a platform light and a display case sitting on top of 170 6-inch shells.



The display box contains the last known parts to two of the 12-inch M1895 guns of Batteries Kingman and Mills. The documents inside the box explain the parts and their relationship to the guns. This display will remain in the Battery indefinitely.



The photo below shows the M1905 deflection board and an EE-91 telephone that connects the board operator to the gun pointer. The telephone has both a TS-9 handset and a HS-17 head/chest set so that two people can use it at one time.



The photo of the plotting room below shows (left-right) a M1 Range Percentage Corrector (yellow circle), meteorological board (above rifle rack), image of a Range Correction Board (left of clock), wind component indicator (yellow circle) and a portion of the M3 Plotting Board on the far right.



On Friday around noon, Gun #2 was made operational for traverse and elevation. The photo below shows Gun #2 traversing to point at Gun #1.



Below is Gun #1 pointing at Gun #2. This is in preparation to make a short film of the two guns traversing seaward and elevating to maximum elevation.



The photo below shows both guns traversed seaward and elevated. This is the first time since about 1949 that both guns have been operated together and traversed seaward. There are films (video) available on the AGFA website of the guns moving together.



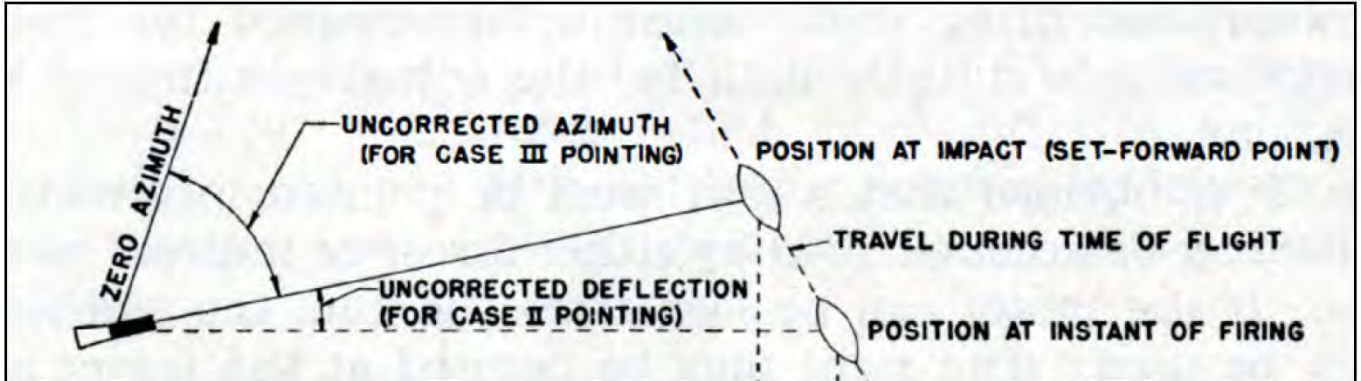
Below 1LT Lutkenhouse is with visitors as she finishes the final preparations for the Lantern Tour. The large display case to the left contains an air filter for the M1A1 Collective Protector.



The assembled M1904 telescopic sight and cradle, with night lighting, represents the full completion of Gun #1's restoration and its first use at night with lighting. The Sight Cradle was completely restored - it was disassembled, all components straightened or brought into tolerance and missing components (deflection knob, deflection scale, light and pointer assembly) were fabricated. The deflection scale is brass and was blackened and whitened similar to the plotting board station arms.



Below is an extract from an Army training manual from 1942. It shows graphically how the M1904 sight is used to apply "Deflection" or the offset of the line of sight from the telescope to the target as it relates to the axis of the bore of the gun. The line of sight is shown below as the hashed line and the axis of the bore is the solid line. Time of flight of a 6-inch shell to maximum range is about 25 seconds (16,000 yards or 9.5 miles). Therefore, the aiming point is ahead of the target as it is being tracked. The point of impact is called the "set-forward point" - the point at which the shell and the ship "meet."



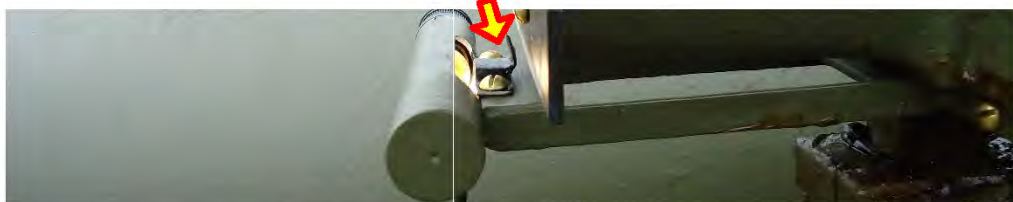
The rear of the sight cradle has a "deflection scale" and that is shown in the photo below. The yellow arrow identifies the black "pointer" which is set to "3" on the deflection scale (see yellow/red pointer). This is equivalent to "0" degrees or alignment parallel to the axis of the gun tube. The deflection adjusting knob is the large brass knob and shaft to the right.



Below shows the deflection scale more closely and shows the yellow/red arrow pointing to "5" on the deflection scale. This setting from the M1905 deflection board is for a target moving from left to right. The maximum deflection is 6 or "3 degrees". A setting of "5" is two degrees to the right of "3" or "zero" deflection.



The photo below shows the pointer and its associated light from the side. The red/yellow arrow indicates the location of the pointer. The light is "on".



Below is an M1905 Deflection Board. This board was manufactured at Frankford Arsenal in Philadelphia around 1910 for 6-inch guns. The M1904 sight cradle receives its deflection settings from this board. The deflection scale matches this board.



The photo below shows the three scales on the M1905 Deflection Board - from the bottom up they are "travel scale", "Azimuth Correction Scale" and "Deflection Scale". The "Range Time Scale Arm" which is shown below on "3" or the "Normal" of the board (the "normal" equals "0"). The Range Time Scale Arm is set to the correct Deflection as firing data is calculated in the plotting room. That data will be telephoned to the Gun Pointer to set the deflection scale on the M1904 sight cradle.



"Normal" numbers are used to removed negative numbers from the calculations. The normal for the M1905 Deflection board and the M1904 sight cradle deflection scale are set at "3" which is "0" for firing data calculation purposes. The M1905 deflection board would have been used until 1943 when Battery Gunnison was converted to Battery Peck and the fire control instruments in the plotting room were upgraded.

The M1905 deflection board was limited to a maximum range of 15,000 yards (about 9 miles). The M1900 6-inch guns at Battery Peck had a range of 16,500 yards - which slightly exceeded the range of the M1905 deflection board. The deflection scale covers 6 degrees - 3 in each direction. By the 1930s this was barely sufficient.

The M1905 deflection board was replaced by mid-1943 with an M1 Deflection Board which could adjust to a longer range (26,000 yards) and had a deflection "normal" of "6" which created a scale of 12 degrees vs 6 degrees. The M1 board was identified in the 1946 updated Battery Emplacement Book that AGFA copied at the National Archives.

AGFA was able to obtain an M1905 Deflection Board - the only such board we know to exist. It was used with many batteries equipped with M1900 6-inch guns during WWII. We are unaware of any existing M1 deflection boards.

The photo below shows PVT Filippelli rehearsing operations of the M1905 Deflection Board and communicating the data to the Gun #2 Pointer.



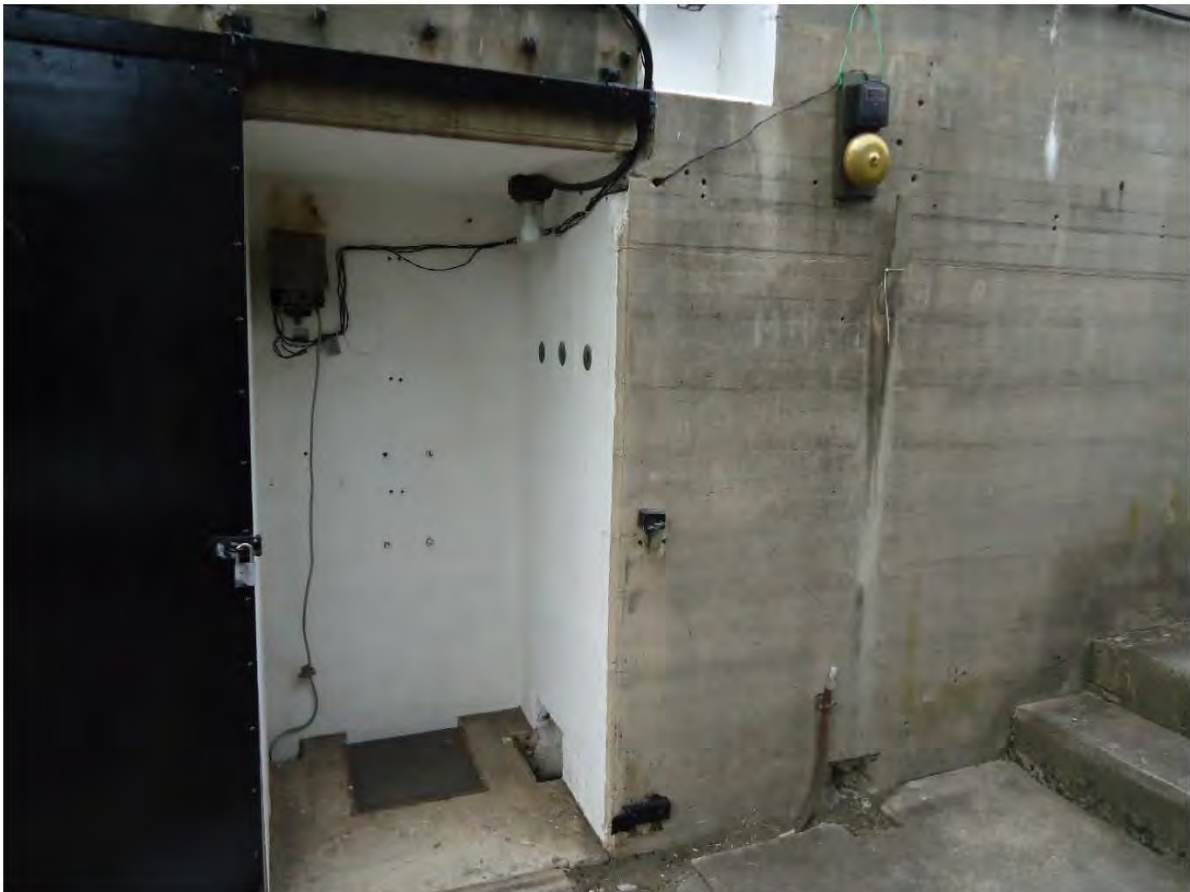
Final actions in preparation included a full sweeping of the area. Below SGT Cusano just finished removing the last of the dirt and vegetation from the Gun #2 service area.



Below 2LT Gonzalez, PVT Ansley and CPL Bujdos prepare the upper shell table for the shell hoist.



The photo below shows the Gun #2 telephone booth with wire connections going out to the gun telephones. The MC-153 Time Interval Bell is in the right of the photo.



At about 1400 hours, CPL Bujdos, PVT Ansley and PVT LeBlanc are rehearsing the "guard post" for the lantern tour.



The Friday dinner was beef stew and it was heated using a 1944 Army field cooking pot on a Coleman 500 Speedmaster stove from 1940. It took about an hour to get the dinner ready. LTC Welch serves a bowl at about 1630 hours.



Below (Left to right) CPL Bujdos, PVT Filippelli, PVT LeBlanc, and PVT Ansley are chowing away.



On the left SGT Cusano, 2LT Gonzales and CPT(CH) Uhler are enjoying dinner and on the right 2LT Cusano is getting her dinner.



Below CPL Bujdos, PVT Ansley and PVT Filippelli chat before the lantern tour.



The team below is gathering for a photo.



The photo below shows the entire team just prior to the start of the lantern tour.



Part of the Lantern Tour was showing our visitors the recently completed gate bar door that AGFA installed in the Mortar Battery/Harbor Defense Command Post (HDCP). Below our visitors are inside the South East pit where the door is located.



The photo below shows the bar door gate as completed. This project was initiated in August 2023. Drawings and construction methods were approved in December 2023. Fabrication began in January and final installation was completed in April 2024. The security project included this door and three metal window closures that allow ventilation yet control access to the structure.



Below our on-tour visitors move through the HDCP south tunnel on the way out of the Battery structure. The graffiti will be remediated at some point in the not-too distant future.



The tour below is pausing on the Multi-Use Path in preparation for encountering the “guard post”.



In the photo below, PVT Filippelli is challenged by the guard mount (on both sides of the road). The guards challenge him, and he responds with the correct password. This allows the tour group to proceed to New Battery Peck.



Below CPL Bujdos salutes the tour group as they pass.



The tour group arrives at New Battery Peck at dusk. Below PVT Filippelli and 1LT Lutkenhouse chat briefly as tour members enter the medical display area.



Below 2LT Cusano chats with visitors in the medical display of the Chemical Warfare Mechanical room.



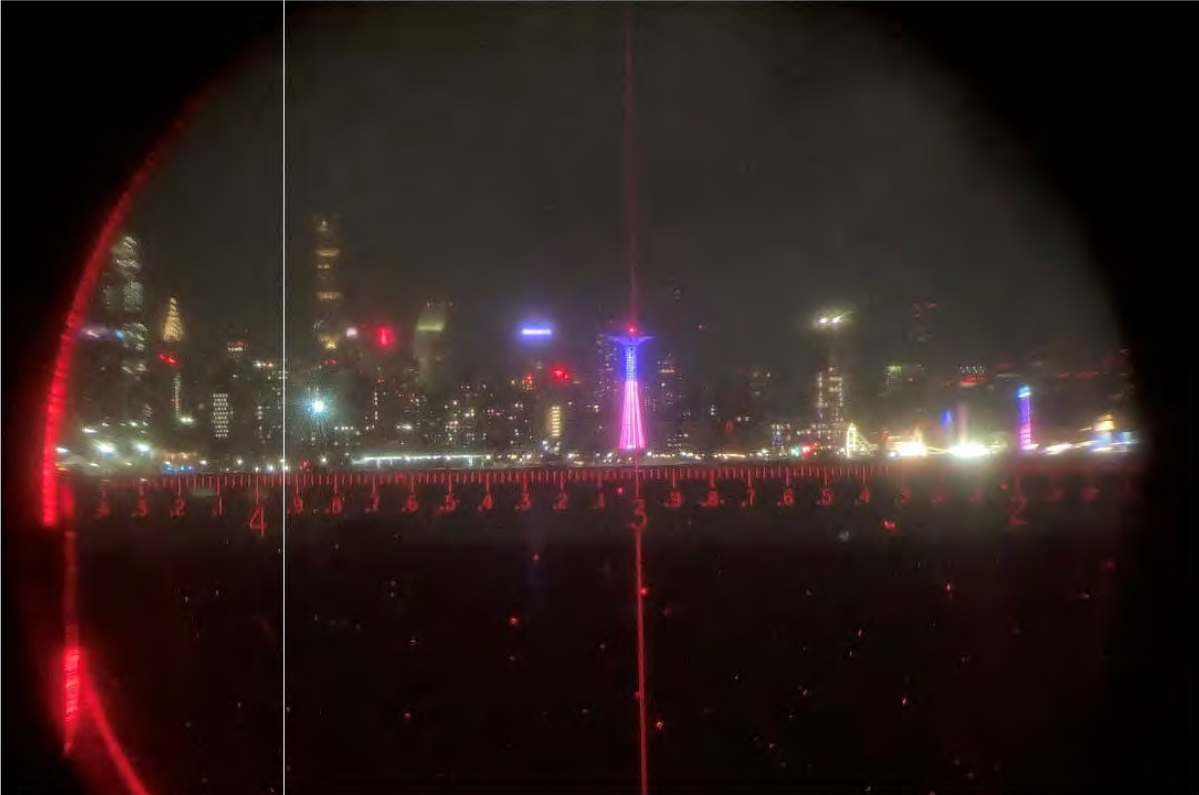
Below T-3 Komorowski explains the machine shop to our visitors. This is a critical component of our restoration work.



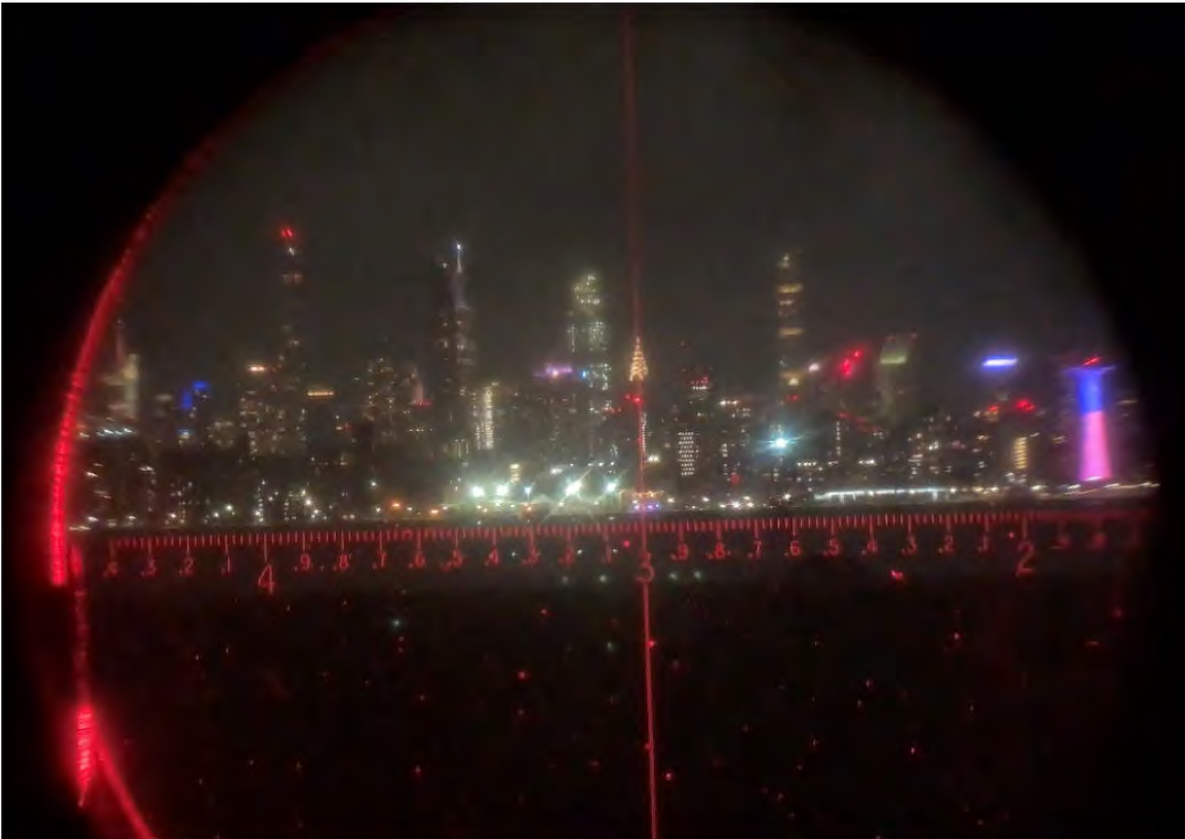
Below 2LT Gonzalez explains the operations of the Battery Commander's Station to visitors. The centerpiece of the station is the M1910A1 Azimuth Instrument on the concrete pier (to the right of 2LT Gonzalez).



Below is the Coney Island, New York City Parachute tower sighted on the vertical line of the M1910A1 Azimuth Instrument's telescope.



Below the Chrysler building sighted on the vertical line looking through the M1910A1 Azimuth Instrument Telescope.



Below PVT LeBlanc and PVT Filippelli take the public through the shell magazine.



Below CPT(CH) Uhler discusses the Army' Chaplaincy with visitors.



Below shows the elevation indicator on Gun #1 and its vintage light to see the elevation drum. New York City is in the background on the horizon.



Below is a closer look at the elevation indicator and the elevation drum. The setting is on 185 mils - which is about 10.9 degrees for 12,400 yards range.



At dusk visitors are discussing Gun #1 with SGT Cusano who is in the M1940 Blue Denim uniform.



The photo below shows the on-carriage fire control system. The M1904 telescopic sight in the M1904 sight cradle are at the top of the photo and at the bottom the Azimuth indicator is illuminated.



Below shows a view of Gun #1 traversed to the north. The light at the top of the gun is for the elevation drum indicator.



Below is a view of the Battery Parade and the Battery Commander's Station.



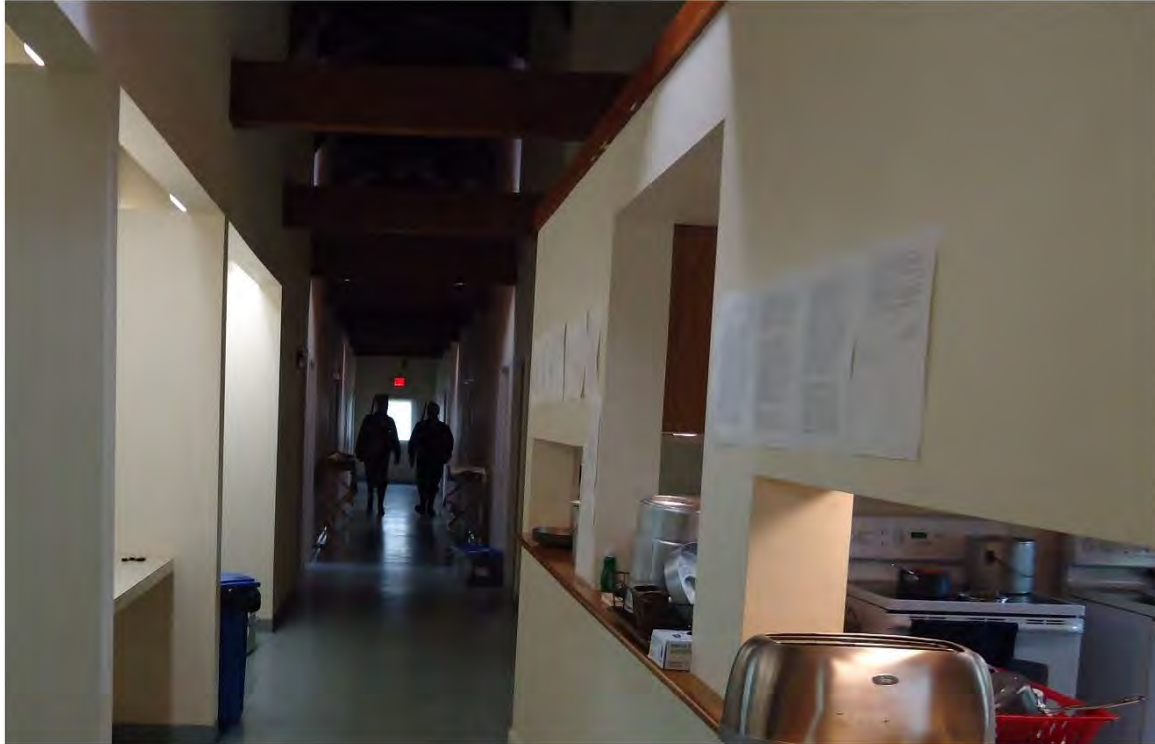
The photo below shows the machine shop and Gun #1 secured for the evening.



At the Barracks (Bldg. #41), SGT Cusano, PVT LeBlanc, PVT Ansley and CPL Bujdos enjoy a sandwich and good camaraderie under the Coast Artillery and US (48 star) flags.



Saturday morning arrived early and below CPL Bujdos and PVT LeBlanc walk down the hall in the barracks (Bldg. #41) to breakfast.



Below the team gathers outside Bldg. #41 for movement to the Mortar Battery/Harbor Defense Command Post (HDCP). From L-R, CPT(CH) Uhler, LTC Welch, SGT Cusano, 2LT Gonzales, 2LT Still, TSG Weaver.



The team below prepares to march to the HDCP. They are (L-R, F-R), PVT Ansley, PVT Filippelli, PVT LeBlanc, 1st SGT Murray, SGT Cusano, 2LT Gonzalez, TSG Weaver, CPL Bujdos.



Below the team is inside the north east pit and are examining the windows the AGFA team installed to control access and ensure ventilation.



Below the team is in the north west pit and is going to examine a bar door from the 1890s that the AGFA team primed/painted. Below (L-R) PVT LeBlanc, SGT Cusano, 2LT Gonzalez.



Inside the HDCP we are walking past the cable troughs for the fire control and commercial telephone switchboards.



Below the team is inside the north east pit. From L-R is TSG Weaver, 2LT Gonzalez, SGT Cusano, CPL Bujdos, PVT Ansley, 2LT Still, PVT LeBlanc.



Below TSG Weaver and CPL Bujdos look at the bar door and pile of dirt inside the pit that will be removed at some future date.



Below the south west pit door has been locked, CPT(CH) Uhler is about to get on his bicycle, 2LT Still turns off the 1940 Coleman 242B lantern and SGT Cusano adjusts the rifle slung on his shoulder.



Below the team is in formation to head back to the barracks. In the front (L-R) is PVT Filippelli and PVT Ansley.



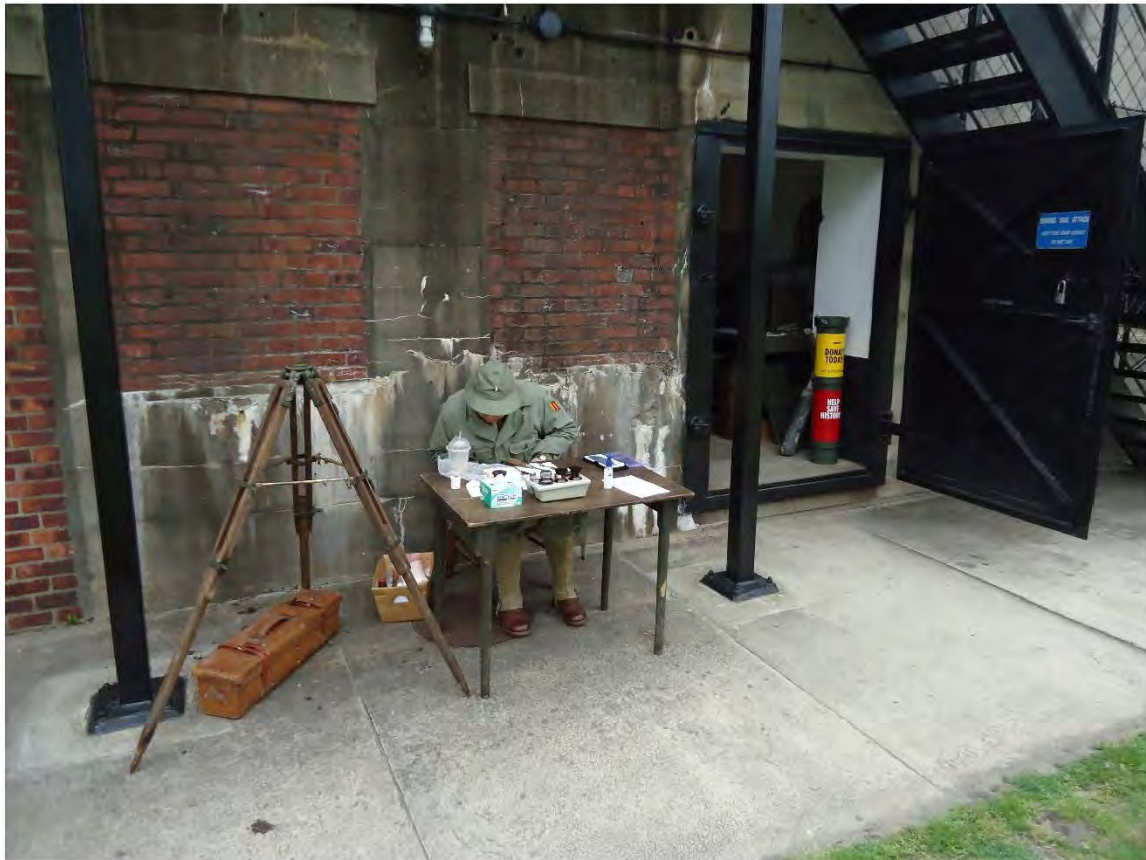
Below the team marches back to the barracks, passing the Sandy Hook Light House and the Keeper's quarters.



Once at Battery Peck, the work begins. Below 2LT Gonzalez begins his work on the optics of his newly-purchased M1910A1 Azimuth Instrument Telescope. All of the optical fire control instruments owned by AGFA and our individual members have been rehabilitated by his exceptional optician skills.



2LT Gonzalez continues his work below.



The photos below show the telescope parts having been disassembled for cleaning and fitting. Made mostly of brass and bronze, they are subject to denting and bending. 2LT Gonzalez's training has well-equipped him to fix these instruments.



Below PVT Filippelli and PVT LeBlanc install the light fixture and defection pointer assembly to the M1904 sight cradle. Most all of the parts that are removable from the sight cradle are stored inside the Battery when not in use.



Below TSG Weaver tests out the M1904 sight and cradle. This is likely the first time the public has seen a working sight cradle on Gun #1 since 1949. The black zip tie secures the M1904 telescope to the cradle.



Once Gun #1 is assembled, the team begins loading drill training. The left photo shows TSG Weaver on the rail with PFC McCoy with the Rammer and SGT Cusano with the Breach swab. On the right 2LT Still prepares to be the elevation setter and PVT LeBlanc prepares to be breach operator with the breach opened.



The start of a drill below with PVT LaBlanc opening the breach for SGT Cusano to swab the chamber of "burning ashes". PFC McCoy stands by with the rammer.



On the left, CPT(CH) Uhler works with PVT Ansley to load the shell. LTC Welch looks on as PFC McCoy rams the shell. On the right PVT LeBlanc stands by the breach block as PVT Filippelli and CPL Bujdos hold the powder tray for the bag to be rammed into the chamber.



Below shows the entire team as PFC McCoy prepares to ram the powder bag into the breach chamber.



After the gun is "loaded", the process is repeated in reverse. Below SGT Cusano uses the "shell extractor" to pull out the drill shell from the forcing cone inside the chamber.



Below is the reproduction M1900 firing device. On the left is the device closed with the reproduction (fake) primer inserted. On the right the device is open with the primer partially removed.



A major part of the Battery training is operating in a 'chemical' environment. Below (L-R) is PFC McCoy, PVT Filippelli, PVT LeBlanc, CPL Bujdos and PVT Ansley in service gas masks. Most of these masks were manufactured between 1941 and 1943.



Below the team takes a break to review our training in the plotting room. From L-R is T3 Komorowski, 1st Sgt Murray, TSG Weaver, PVT Filippelli, PVT Ansley, CPL Bujdos and PVT LeBlanc.



At about 1800 hours we returned to the Barracks and prepared for dinner at the Mule Barn Tavern (<https://www.mulebarntavern.com/>).



On our way to the Mule Barn the team gathered for a photo. From L-R, CPL Bujdos, 1LT Lutkenhouse, LTC Welch, PVT Ansley, PFC McCoy, PVT Filippelli, CPT(CH) Uhler, T3 Komorowski, TSG Weaver, 2LT Still, 2LT Gonzalez, SGT Cusano, 2LT Cusano and 1st SGT Murray.



At 1855 hours we arrived at the Mule Barn. Below CPT(CH) Uhler walks past the outdoor patio and "The Shack" - a new outdoor bar area.



Below 1LT Lutkenhouse works with our server to confirm "who got what" and prepare our team to "pay the bill".



Below the team has just finished ordering and is awaiting our food.



Another photo of the team after dinner. This is the second floor of the Mule Barn Tavern. The building was built in 1907 and was converted to a restaurant from 2019 to 2023. It opened in the summer of 2023.



Sunday morning opened with breakfast and a service with CPT(CH) Uhler officiating as our pastor.



We arrived at the Battery at about 0900 in the morning. Below we are setting up a fly to cover the Chemical Warfare exhibits. The Fly is owned by CPT(CH) Uhler.



The setup continued until we opened at 1100 hours. Below is Gun #1 being set up.



Below 2LT Gonzalez and 1st SGT Murray are setting up the Battery Commander's Station. The optical device on the concrete wall is from about 1918 and is used to train ordnance technicians on the structure and working of the optics within the M1910 azimuth instrument telescope (and similar telescopes).



Another view of the Battery Commander's Station with 1st SGT Murray and the M1910A1 Azimuth Instrument to the left.



As we were setting up, the USS Wasp (LHD-1) entered into Ambrose Channel.



Below is a photo of the USS Wasp passing Gun #2.



At 1100 hours the team that was present took a photo - seventeen of us - with a couple more arriving later for a total of twenty members for the day.



By 1045 the Chemical Warfare displays were established under the fly shown below.



Below are a series of US Army gas masks. The black one next to the clear mask is an "optical mask" which had lenses that facilitated the use of optical instruments such as the M1910A1 Azimuth Instrument. The clear mask is for head-wounded patients.



More unique US Gas Masks are shown below. Additionally, the filter canisters are shown with their interiors exposed enabling the public to see how they are constructed.



Additional masks are on display below to include a post-WWI mask.



Decontamination is a critical capability and the materials shown below are all used in the decontamination process.



Below to the right is a decontamination sprayer. The material on the table includes a Chemical Gas applicator and the inert (fake) chemical weapons delivery systems (bombs, artillery shells, hand grenades and mines).



The display below includes chemical munitions such as 155mm, 4.2-inch mortar, 75mm and 3-inch artillery and a 100 lbs. chemical bomb. In the top center is a flamethrower - another Chemical Warfare weapon.



The photo below shows visitors at the Chemical Warfare equipment display.



The plotting room saw significant visitation. Below, 1LT Taylor discusses the operations of the plotting board with visitors including NPS Rangers.



Another view of the 1LT Taylor discussing plotting room operations with visitors.



Up on Gun #1 platform is a rifle rack with five M1903 Springfields and one M1 Garand rifle. To the right is the 6-inch gun implement rack with a sponge, rammer and drill shell extractor (hook) staff. The chamber swab solution bucket is to the right.



Below the team prepares to execute a gun-loading drill.



Below LTC Welch outlines the conduct of the loading drill as (L-R) SGT Cusano, PVT Ansley and PVT Filippelli stand ready.



L-R shows SGT Cusano preparing to swab the bore, LTC Welch ready with Rammer, CPL Bujdos with the powder bag in tray, PVT Ansley and PVT Filippelli with the shell tray.



SGT Cusano pulls away with the swab as PVT Ansley and PVT Filippelli move in with the shell tray. On left, the head of the rammer can be seen preparing to ram the shell. 1st SGT Murray is removing the "fired" primer from the firing device at the back of the breach block. CPL Bujdos readies the powder bag for loading, on left.



Below LTC Welch begins to ram the shell into the chamber as SGT Cusano moves away with the chamber swab.



After the drill, the gun platform experiences a “Chemical Attack” and all begin to put on their gas masks.



Below 2LT Still begins to put on his mask as 2LT Gonzalez tests his mask and 1st SGT Murray secures his mask over his head.



Below the rest of the gun crew puts on their gas masks.



Below 2LT Still, 2LT Gonzalez and 1st SGT Murray are ready to begin the loading drill in chemical protective posture.



With the entire gun crew in masks, the loading drill is ready to begin.



Below LTC Welch rams the shell into the chamber.



We were very fortunate to have a special visitor on Sunday - Larry Mihlon with his 1938 Plymouth. Below Larry and 2LT Cusano discuss this wonderful car.



Another view of the 1938 Plymouth - parked on the Battery Parade and amazingly - totally alone! That didn't last long...



Right after the gun drill is completed, selected members return to their stations. 2LT Gonzalez prepares to greet visitors climbing the stairs to the Battery Commander's Station.



The photo below shows a barge and tug boat through the M1910A1 Azimuth instrument.



Below is the Battery Commander's (BC) station viewed from Gun #1 position.



This view of the BC Station is diagonally from the front (seaward) side of the Battery.



Outside of event weekends, the magazine is a major workshop for the team. Below TSG King sits at his workbench awaiting visitors.



Below TSG King is explaining the 9-gun Battery platform light project to two Park Service custodial personnel. At least ten NPS personnel visited during the day.



Below T-5 Morrison is explaining the shell table of the hoist to visitors.



Below T-5 Morrison then takes the visitors to the ammunition display after having a short conversation with TSG King at his workbench. On the left are about 170 6-inch projectiles. On the right is a large threading machine for cast iron pipe up to 6-inches in diameter and the 1920 artillery fuse board is visible in the lower right.



At 1600 hours the final gun demonstration began. On the left, PVT LeBlanc and 1st SGT Murray prepare for the drill. On the right, 2LT Still and CPL Bujdos prepare the breach area for the drill.



Below CPL Bujdos holds the powder tray and bag on the railing in preparation for the last demonstrations of the day. The hood on his back is a special chemical protective hood that is worn during heavy chemical attacks or decontamination operations. The "GAS" brassard is worn to signify he is part of the decontamination team.



The final gun drill of the day started with about 25 visitors on the platform.



In the photo below (L-R), 2LT Gonzalez begins lowering the gun tube to loading angle, PVT LeBlanc opens the breach block, PVT Filippelli and PVT Ansley stand ready with the shell tray, 1st SGT Murray begins movement to the breach block to remove the “fired” primer, CPL Bujdos is ready with the shell tray, SGT Cusano is ready with the swab and LTC Welch has the rammer ready.



Another view of a gun drill - the shell is being rammed into the chamber.



In this view the powder bag is being rammed into the chamber and 2LT Gonzalez begins elevating the gun tube.



The view below shows the gun tube being elevated and 1st SGT Murray is inserting the primer.



Below the gun crew begins its "gas attack" by putting on their protective gas masks.



Below the loading drill is ready with the crew in gas masks.



Below LTC Welch finishes his talk explaining how this drill is done in chemical gas masks and that it should take twice as long as without masks.



After the gun drill, the Decontamination Team begins preparing their materials for decontaminating the gun and equipment from the attack.



Below the team is preparing their decontamination solutions.



The team uses the sprayer and sponge sticks to clean the surfaces of the gun.



The team continues the decontamination operation below.



At the end of the decontamination drill, the team “tests” for the presence of a chemical agent and gives the “all clear”.



After the “all clear” was given, the team began to disassemble all the outside exhibits. Our visitors were able to watch us break down, and in some cases got a final tour - below visitors get a few last moments with the medical team.



The last of the public leave the medical display and 2LT Cusano and 1LT Lutkenhouse pause for a picture before packing up their displays.



SGT Cusano is preparing to take four rifles from the gun platform as PVT Ansley returns for additional equipment.



Below 1st SGT Murray begins disassembly of the telephone and time interval equipment. He has just removed the MC-153 Time Interval bell.



CPT(CH) Uhler's box truck is on the Battery Parade and preparing to load the Chaplaincy exhibits and the fly used for the Chemical displays.



Final takedown and folding of the fly has commenced - soon it will be packed.



CPL Bujdos and PVT LeBlanc begin the process of securing Gun #1.



The last act for securing the gun is to install the breach cover and lock it in place.



At 1900 hours those of us who remained had dinner at the Mule Barn Tavern.



L-R, 2LT Cusano, 2LT Gonzalez, SGT Cusano, 1LT Lutkenhouse, PVT Ansley, PVT LeBlanc and CPL Bujdos have their final conversations and say final goodbyes.



The photo below shows the Mule Barn Tavern's new outdoor Bar at night.



With Battery Gunnison/New Battery Peck fully secured, another “Coast Defense Days” weekend comes to an end. The Battery will be open during the summer during workdays that are scheduled with the National Park Service. AGFA’s schedule can be reviewed at <http://armygroundforces.org/new-events.htm>. Learn about the Mule Barn Tavern at Fort Hancock by visiting <https://www.mulebartavern.com/>. For additional information regarding the Fort Hancock and Sandy Hook Proving Ground National Historic Landmark District visit the NPS website <https://www.nps.gov/gate/index.htm> or call (732) 872-5970.