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CDSG Conference Report 2019 Annual Conference to the Harbor Defenses of the Chesapeake Bay

Terrance McGovern

The CDSG successfully held its 37th annual conference to the former Harbor Defenses of the Chesapeake Bay (HDCB) from April 10 to April 14, 2019, with 73 CDSG members attending, plus several site owners joining us each day. The former defenses of the Chesapeake Bay protected Hampton Roads and the bay's important military sites, industrial enterprises, and access to the important cities of Baltimore, Washington, and Richmond since colonial times, resulting in several layers of coastal defenses. This key role resulted in the construction both of 2nd and 3rd-System fortifications which took part in the American Civil War and the famous naval battle between the USS *Monitor* and CSS *Virginia* in 1862. The importance of the HDCB led to the construction of extensive Endicott-Taft defenses, as well as World War II forts at Cape Charles and Cape Henry at the entrance to the bay that resulted in the largest collection of 16-inch (10) and 6-inch (12) batteries in the United States.

Gaining access to the remaining coast defense structures of the former HDCB with its sub-units of Fort Monroe, Fort Wool, Fort Story, Fort John Custis, Fisherman Island MR, and Fort Norfolk has become much more difficult since our last conference to the Tidewater area in 2000. General security issues since "9/11," the continuing military use of JEB (Joint Expeditionary Base) Fort Story, concerns about impacts on wildlife, health & safety concerns, and even weather issues made our efforts to receive permission to visit the many coast defense sites, as well as to obtain access to interior spaces of these structures, a very complex and time-consuming process. We worked with the Fort Monroe Authority, National Park Service, US Army, US Fish & Wildlife Service, City of Hampton, and the US Navy for approval to tour their structures. Through use of background checks, chartered buses and boats, waivers, safety equipment, and escorted groups, we received approval and permits from all these sites' owners to tour these historical fortifications, although with special limitations per each site owner.

The headquarters for the 2019 Annual Conference was the Quality Suites & Sleep Inn Lake Wright – Norfolk Airport, based on the best location for our daily field trips, the quality of the facilities, and the room prices, including free breakfast, internet, and parking. The hotels provided free meeting rooms for our nightly presentations, which were held on Wednesday, Thursday, Friday, and Saturday, based on our use of sleeping rooms, and by holding our annual banquet at the hotel. We had 21 great presentations over these four nights. Thanks to Quentin Schillare for organizing these presentations. David Kirchner directed our nightly "Coast Defense Materials Sale" event. Several members brought great items for sale and display, while Elliot Deutsch and Tom Vaughn donated a sizeable portion of their military book collections to the CDSG Fund, which conducted both a live and silent auction of these items. A total of \$1,250 was raised for the CDSG Fund, while sales of CDSG Press books and CDSG membership gear brought in another \$450 for our organization.



2019 Annual Conference site map. (NA Forts Website)

Summarized below are the key daily conference events. Each morning our conference members had breakfast at the hotel between 6 and 7 a.m. before collecting their field lunch/drink for our 7 a.m. departure for our field trips. Due to requirements of some of the site owners, we conducted "safety" inspections of all the conference members before departure, checking for boots, gloves, flashlights, and hard hats.

Wednesday, April 10

CDSG members gathered between 4 and 6 p.m. at the Quality Suites & Sleep Inn Lake Wright – Norfolk Airport for conference registration and hotel check-in. After having dinner on their own, we kicked off our conference orientation and nightly presentations at 7 p.m. in the hotel's primary meeting room. Excellent presentations were given by Quentin Schillaire (History of the Coast Artillery School), Robert Kelly (Construction of Fort Monroe, focusing on the use of slave labor), John Weaver (discussion of an attack on Fort Monroe, which did not happen), and finally Bob Walk (History of Gas Proofing Coast Defense Forts). Also buying/selling coast defense books and documents in the back of the room started in earnest.

Thursday, April 11

Conference members took on the morning traffic in their own cars to make their way to Fort Monroe (1819-2011) in Hampton. Designed as the first Third System Fort by Brig. Gen. Simon Bernard, construction of Fort Monroe began in 1819 and was completed in 1834. Modernized during the Endicott-Taft Period, it became the home of the Coast Artillery School before being deactivated by the army in 2011. Our first stop was inside Old Fort Monroe at the Casemate Museum. We were greeted by Robert Kelly, historian for the Fort Monroe Authority (FMA), who led us on a guided tour of key coast defenses sites within the walls of the old fort. Our first stop was the Flagstaff Bastion, which contained the old officers club, the saluting battery, and several gun emplacements on Front 1. We walked down to Front 3 so we could travel through abandoned casemates to Casemates



Current view of Fort Monroe, Hampton, VA. (FMA Photo)

#132, 134, and #134 that once were the headquarters for the HDCB. We also visited Casemate #138 and the Water Bastion to visit Fort Monroe's Mine Casemate #3. These spaces are in abandoned condition and have limited remains of their former use, such as gas-proof air lock and concrete pads for machinery.

Passing by former Mine Casemate #2 (a wooden building now leased to a private firm), we climbed the ramp to WW2 HECF #2 (also known as the signal station). This HECF covered the entrance into Hampton Roads between Fort Monroe and Fort Wool as well as the controlled minefield at Thimble Shoals. The Art Deco-looking HECF has three levels, two with observation windows, while the top of the structure was a flag station for signaling. The army used the structure for several functions, the last being a recruiting office. Today, it is abandoned. Conference members spread out at this point to visit the terreplein where the footings for fire control stations, searchlight towers, and radar were once located, as well as the pintles and traverses for seacoast cannon once mounted along the terreplein. Walking past the remains of Battery Gatewood (four 4.7-inch P) on Front 4, we gathered at the N.E. Bastion's Endicott-period battery that once mounted a 10-inch M1896 gun mounted on a M1894 disappearing carriage. The emplacement was later converted to a group of fire control stations. The emplacement is abandoned and sealed so we could not visit its magazines. We did view the

remains of the Water Battery across the moat and a few remaining emplacements for 8-inch guns on barbette carriages.

We walked around Quarters #1, currently being restored by the NPS. We stopped on the way back to the Casemate Museum to check out the Lincoln Gun, a 15-inch Rodman gun on display on the parade ground. Returning to the museum, we spent an hour having our field lunches and exploring the museum. Before we departed for our next stop, Glen Oder, executive director of the Fort Monroe Authority, welcomed us and gave a talk on the current activities of the FMA. We reminded him of the importance of Fort Monroe's long coast artillery history. We told him that the CDSG expects them to make the preservation and interpretation of this history to be one of their pillars of their programing and investment. We advocated that the FMA's new visitor center should have strong displays on fortifications and coast artillery, not just the history of First Landing and Civil War Contrabands. We raised a concern that the Casemate Museum's displays have already lost coast artillery artifacts to the Center of Military History and they have not been replaced with new coast artillery displays. We told him that the CDSG now has an agreement with the Casemate Museum to become a repository for CDSG member's collections and we hope these items would be placed on display. Clutching our purchases from the museum gift shop, we loaded up our cars for the short drive to Fort Monroe's controlled mine complex at Old Point Comfort.

The mine complex (still owned by the US Army) was made up of the mine wharf, cable tank building (Bldg. 205), and mine storehouse (Bldg. 204). The loading room and high explosive magazine have disappeared. The cable tanks have been filled in and the metal building was used as a machine shop by the Navy until several years ago. The mine storehouse still contains much of the "fabric" of its original design (for more details on the mine complex see the article in the August 2016 *CDSG Newsletter*). The mine wharf, cable tank building, and brick mine storehouse are currently empty. These structures will be leased out for commercial uses once they are transferred to the FMA. The CDSG hopes that their future use allows them to retain their current CAC features.



HECF #2/signal station on top of Water Bastion with Battery Parrott in background. (McGovern Collection)



CDSG members explore the mine storehouse at Fort Monroe. (McGovern Collection)

Passing by the abandoned (and available for lease) Coast Artillery School campus in our cars, our conference members gathered at Battery Parrott (two 12-inch DC) and Battery Irwin (four 3-inch MP). Conference members were drawn to Battery Irwin with its two surviving 3-inch pedestal guns with WW2 shields. Turning to Battery Parrott, conference members focused on AMTB #23 that was built on the loading platforms for the 12-inch disappearing guns. One of the WW2 emplacements still mounts a very rare 90 mm M1 gun on an M3 pedestal mount (this carriage came from Fisherman Island MR, VA).



CDSG members make their way from Battery Irwin's two 3-inch M1902 guns to Battery Parrott's 90 mm M1 gun.
(McGovern Collection)

Our members proceeded to explore Battery Parrott's large gun emplacements, ranging from the top of the WW2 modified BC station to the magazine's rear access stairwells deep within the emplacement. We thanked Robert Kelly and FMA for being excellent hosts as we now would be visiting the Endicott-Taft batteries controlled by the National Park Service (NPS). The FMA are seeking ways to put their two batteries into economic use, but currently they are unused and deteriorating, while the rare CA guns are subject to vandalism. CDSG has advocated to the FMA that they maintain these batteries and not let them deteriorate further. They have asked CDSG to propose possible good long-term uses for Battery Parrott. One idea is a seasonal restaurant/bar overlooking the bay with part of the rent dedicated to preserving Battery Parrott. What are your ideas?

Our first stop in the NPS-managed area of Fort Monroe was Battery DeRussy (three 12-inch DC), where we met Aaron Firth, Dom Hill, and Richard Cox from the NPS to oversee our visit and provide access to the NPS properties. As part of our agreement to visit these batteries (both interiors and exteriors) our conference members became NPS volunteers for the day. We were tasked with inspecting and documenting each battery's current condition while noting any key artifacts and their stabilization needs. The NPS has not focused its resources on these Endicott Batteries since taking them over from the army in 2011. They want our guidance on how best to preserve and interpret these emplacements. We have been asked to provide a formal report to NPS on their current condition and how they can be best utilized as part of the national monument. This is our opportunity

to provide input and to make sure the batteries are not allowed to fall into "ruins status," to be fenced off and allowed to become true ruins. So, as an CDSG member, please provide your input to Terry McGovern at tcmcgovern@att.net.

Battery DeRussy retains some notable features such as its Taylor-Raymond shell hoists, the remains of an army museum in one of its emplacements, and an excellent slate electric board in a power building. We drove down to Battery Church (two 10-inch DC) which is also in abandoned condition. The battery was converted during WW2 to support Battery Montgomery (two 6-inch BC) by hosting its SC-296 radar station in its right magazines and its



One of three Taylor-Raymond chain hoists in Battery DeRussy. NPS is looking for ways to preserve them. (McGovern Collection)



Very interesting emergency station on top of Batteries Anderson-Ruggles with the earthen protection removed.
(McGovern Collection)

CRF station on top of the battery's traverse. We were only able to gain access to the radar station, as the other doors were rusted shut or blocked. The steel ladders to the loading platforms have been removed and thrown into the counterweight wells, and the earthen protection has been removed from the front and side; the only way up was to use an aluminum ladder. The NPS was worried about 73 members climbing a temporary ladder so they decided that only six members could go and take photographs for the rest of the group. The process of selecting these six members was very interesting, as each member that wanted to climb the ladder was asked to make their "best" argument why they should be selected. After the "best" six returned from the top of the battery, our group drove to Battery Anderson (eight 12-inch mortars) and Battery Ruggles (eight 12-inch mortars).

The second part of our NPS volunteer agreement was to provide a CDSG work party to clear the four mortar pits of vegetation. Based on our pre-conference scouting, we knew this would be a major task, as large trees surrounded by brush and thorns have been allowed to grow in the pits. Ned Libby and Terry McGovern visited the batteries the day before with chain saws and cut down as many of the trees as they could before their chain saws gave out. The task of our work party would be to clear the brush out and haul these newly cut trees to the main road. Our conference members spent about 90 minutes clearing the pits, while another team dug the sand out of the passageway within the batteries to allow us to explore all the shell and magazine rooms. Once the work parties completed their tasks, our members examined the mortar batteries. Much of the protective earthen cover has been removed from Battery Ruggles, though some of this damage may have occurred during the 1933 Hurricane. A very interesting observation station, accessed from within the battery by spiral



Battery Anderson's Mortar Pit #2 after CDSG work party removed most of the trees and brush. (McGovern Collection)

staircase, towers over the center of the two batteries due to loss of the protective cover. Our field trips for the day were complete, so conference members went back to the hotel or to search for the sites of the railway batteries (Ashbridge), the 155 mm battery (Taylor), the 3-inch AA batteries in Wilson Park, or fire control and searchlight station footers and balloon hanger foundations in the North Beach area, while others visited the Oozlefinch Craft Brewery on Patch Road to drink a Sergeant Patches IPA.

After having dinners on their own, our members gathered for our conference orientation and nightly presentations at 7 p.m. in the hotel's primary meeting room. Excellent presentations were given by Dave Kirchner (Disposing of One's Coast Defense Collection), Charles Bogart (Report on Army Hygiene at Army Posts & Towns), Paul Olsen (History of Fort Norfolk), and Shawn Welch (Restoration Projects at Fort Hancock/Battery Gunnison, as well as Lessons Learned from Fort Hancock's Leasing Program). Also buying/selling coast defense books and documents was supplemented with the CDSG Fund silent auction.

Friday, April 12

Conference members departed in their own cars from the hotel to pass over/under the Chesapeake Bay Bridge/Tunnel to make their way to Fort John Custis (1940-81) and Fisherman Island Military Reservation (1917-69) at Cape Charles. They were integrated into the bay's defenses in 1940 to complement Fort Story, in protecting the entrance to Chesapeake Bay. Fort Custis was closed in 1948 and subsequently was a Lashup radar site from 1950 to 1952 and the Cape Charles Air Force Station from 1952 to 1981. Our first stop was at the Eastern Shore of Virginia National Wildlife Refuge Visitor Center, where we met Bob Leffel, Stacey Lowe, and John Griffith, who would be our guides for the day. The US Fish and Wildlife Service (USFWS) controls these former military reservations. They were very concerned about our health and safety, as well as protecting the wildlife, especially care for the nesting birds. They issued CDSG two special use permits with many requirements to allow us into Battery Winslow and Battery #227, as well even to visit Fisherman Island MR due to nesting birds. They required that we separate into two smaller groups so we could take turns visiting Fisherman Island – both



CDSG work party hauls trees and brush from Batteries Anderson-Ruggles's four mortar pits. (McGovern Collection)



A view from the south of Fisherman Island. The MR is the area inside the curve of the highway, with Fort John Custis to the right of the highway on the mainland. (USFWS Photo)

due to the lack of parking and to lessen the impact on the nesting birds. Ned Libby led one group to Fisherman Island MR, which is accessed via the Chesapeake Bay Bridge/Tunnel roadway. From a small parking area, the group walked down a sandy road to Battery #227 (two 6-inch shielded BC). Due to its isolated location (until the bridge/tunnel was constructed), this battery retained its two 6-inch shielded guns until 1975 and has retained all of its power equipment. This rusty but complete power room was a treat for our members. Keeping together to avoid nesting birds, the group visited the remains of AMTB #24 (two 90 mm FM), whose gun blocks are currently lost in the sand, and Battery Lee, also known as ATMB #20 (two 3-inch P). The group was able to walk around Mine Casemate #4, which is both buried and threatened by the bay at the same time.

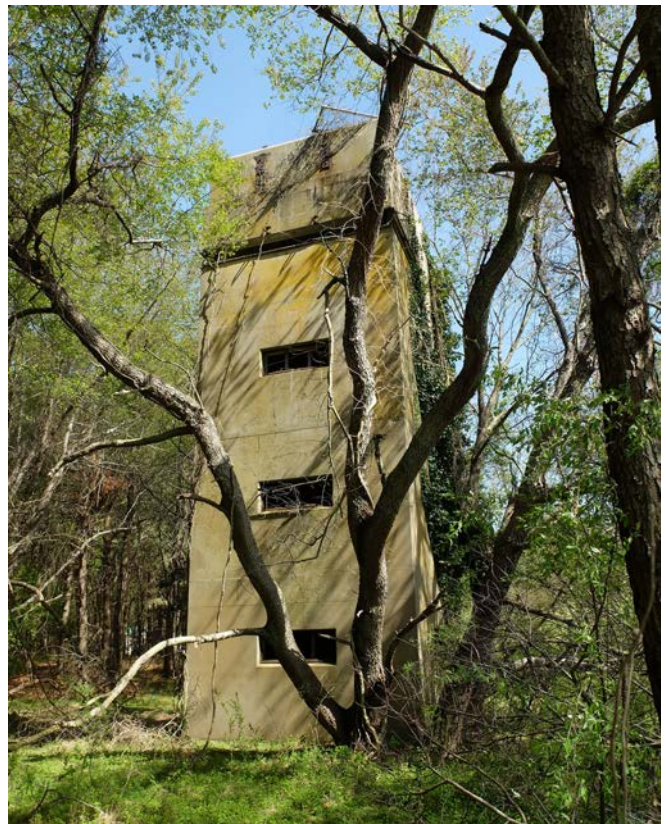
While this group visited Fisherman Island MR, the second group, led by Terry McGovern, drove to Battery Winslow (two 16-inch casemate BC). Entering through the western gun casemate, we were treated to a 16-inch/50 Mark 7 barrel that served on USS *Missouri* during WW2. The huge barrel was on a cradle over the casemate's gun well. The locked service corridor was opened for us and we quickly spread out within Battery Winslow. We explored the entire battery, and a few members tackled the dense vegetation to visit the BC station on top of the battery. The group gathered to walk about one-half mile down a dirt road to the two-story concrete metrological station. Returning



Battery Winslow's Casemate No. 1 with 16-inch/50 barrel that served on the USS *Missouri* during WW2 and Korean War. (McGovern Collection)



CDSG members explore Battery Winslow's power room (or stand around talking). (McGovern Collection)



Fort John Custis's group tower has become lost in the woods. During our 2000 Conference it was in an open field.

(McGovern Collection)

to our cars, we had a quick stop at Battery Winslow's buried PSR. Driving again we made our way to the four-story group FC station, which is now lost in the woods. We then drove to Battery #228 (two 6-inch shielded BC). The battery is buried and overgrown to the point that we could not locate the two concrete gun emplacements.

Both groups came together to drive to the WW2 Cheapside Fire Control Tower (Loc 32). This is one of the few WW2 steel and concrete towers to survive. We viewed the tower from the ground, as the ladder to the three stations has rusted away along with much of the lateral support. Sadly, since our visit the owner



Rusty but fully equipped power room for Battery #227 on Fisherman Island MR. (McGovern Collection)



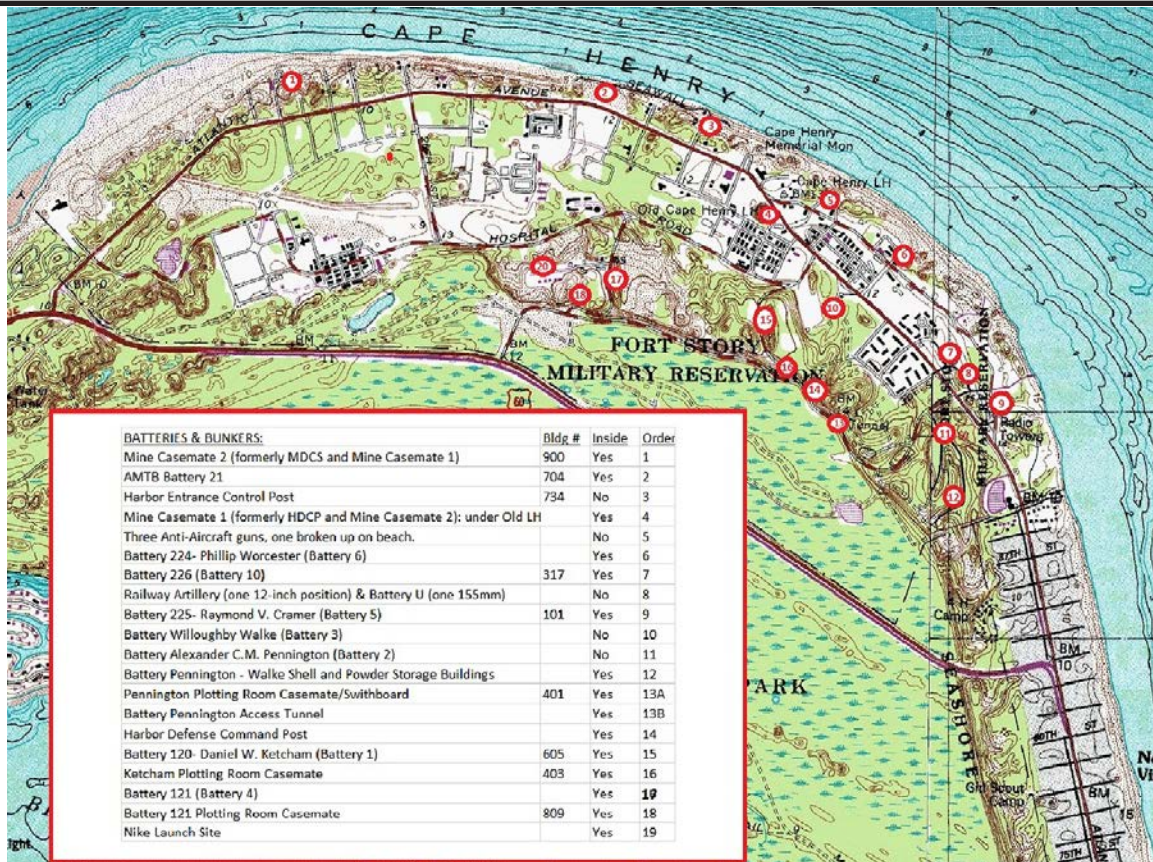
Cheapside Fire Control Tower during our conference with its three concrete stations and AAFS on top. (McGovern Collection)



Cheapside Fire Control Tower today. Tower has been toppled with concrete station broken into two parts with the upper station upside down. (McGovern Collection)

has toppled the tower due to concerns for its stability and the stations are now broken on the ground. We returned to the visitor center to eat our field lunch and prepare to switch site visits with the group that went to Fisherman Island MR in the morning, now visiting Fort John Custis, and the group that went to Fort John Custis now going to Fisherman Island MR. Both afternoon tours went well and we thanked the USFWS managers for allowing us to visit their military structures, especially Battery Winslow and Battery #227 that have important artifacts (16-inch/50 barrel and intact motor generator room). We urged them to try to preserve the power room and its rare equipment in Battery #227. We also advocated that they need to stabilize Battery Winslow itself, especially its interior, so they can offer public tours. The USFWS unfortunately is short of both manpower and funding. The CDSG Fund has provided a grant of \$1,000 to prepare a proper display on the military history of the refuge, including a film display on 16-inch gun drill. They have yet to do so, so we reminded them of their plans to complete this display in the visitor center. We hope they do so.

Upon returning to the hotel, members gathered for the annual group dinner and our CDSG annual business meeting. After a buffet dinner in the foyer of the conference center for the hotel, we returned to our meeting room for the annual business meeting, conducted by the CDSG Board of Directors, as reported upon in the May 2019 CDSG *Newsletter*. Upon completion of the annual business meeting, we held our next-day conference orientation and then our nightly presentations. Excellent presentations were giving by John Weaver (Who's the Biggest 3rd System Fort), Marshall Snyder (The USMC and Coastal Defense), Karl Fritz (Endicott-Taft Landward Defenses), and Dave Larsen (Hazard Mitigation). We also continued buying/selling coast defense books and documents and the CDSG Fund silent auction.



Primary coast defense sites at JEB Fort Story. We could only visit 12 out of 20 sites this conference. (CDSG Annual Conference)

Saturday, April 13

While the first two full days had excellent weather, Saturday morning brought rain. It also saw us switch over to chartered motor coach due to the navy's access requirements at JEB Fort Story. Two buses took us to our first site visit of the day at Camp Pendleton, in Virginia Beach. Camp Pendleton has been one of Virginia National Guard's key bases for many years, but its role as a former WW2 Coast Artillery Training Center for mobile artillery was the reason for our visit. After passing through the main gate, we gathered in Hurt Hall, where we meet our hosts, Susan Smead, Sarah Campbell, Alex Barnes, and Chris Parr who provided an orientation and background information about Camp Pendleton. We broke in two groups, one to visit



Commander of the Army 11th Transportation Bn., LTC Boffardi, at former AMTB #21 to explain his unit's function and activities. (McGovern Collection)

the historic rifle range and one to visit a restored WW2 barracks. Both groups had to deal with challenges – the rifle range was in use and the pouring rain made visiting the barracks area a very wet experience. We thanked our hosts and proceeded to our primary site visit for the day, JEB Fort Story (1917 – present), also in Virginia Beach. It was acquired in 1914 and developed into the primary coast artillery fort defending the entrance to the Chesapeake Bay during WW2.

Joint Expeditionary Base Little Creek-Fort Story is an active military base run by the navy. Following the events of 9/11, the Navy is much more security minded as compared to the Army who controlled the fort when we held our conference here in



CDSG members become "paparazzi" when a rare plotting table was found inside Mine Casemate #1 (later HDPC) at JEB Fort Story. (McGovern Collection)

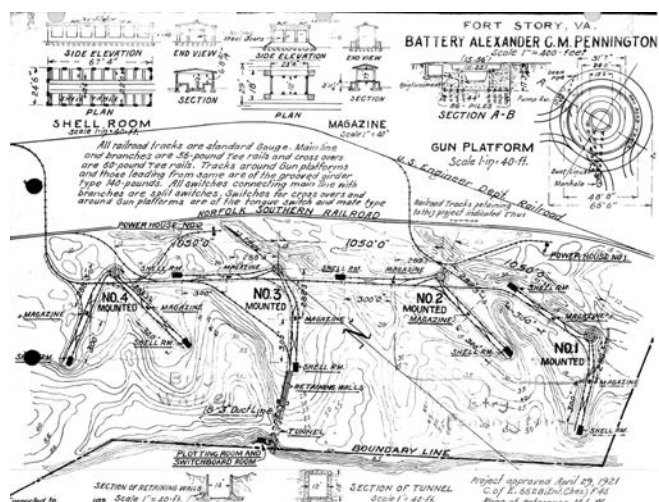
October 2000. The Navy required a background check in advance of all conference members and the use of charter buses, instead of personal cars, for our tour. Upon our arrival at Gate 8, we were asked to disembark with all our gear for us and our gear be inspected, while the buses themselves were searched. While we went through this lengthy process, our hosts, Heather Lawrence and Scott Mohr, arrived to escort us on our negotiated tour plan. Many coast defense structures we visited during our conference in 2000 (12 out of 20 sites) are now off limits, as they are now part of JEB Fort Story's "training ranges." The 16-inch batteries that were built into the JEB Fort Story's Great Dune are now all off limits, as this now a closed training range, like the Nike launch area. Our first stop was at former AMTB #22 (two 90 mm FM) which had a combined BC and magazine structure. This structure is now used by the Army 11th Transportation Bn.



The U.S. Navy has proposed destroying Battery #226 at JEB Fort Story as they have no "tenants" for the structure. CDSG advocates sparing this battery. (McGovern Collection)

for their secure communication equipment, so we were not able to visit the interior. The battalion commander, LTC Bonfardi, was on hand to explain his unit's function and activities. Back on our buses, we moved to our next stop, the former base commander's residence, used as the HECF and met station during WW2. We were not allowed inside, as the house is scheduled to be demolished due to its exposed location on the water's edge and its deteriorated condition.

Our next stop was the old Cape Henry Lighthouse, which is under control of Preservation Virginia and closed for dune stabilization. We were able to visit the interior of the former mine casemate, which served as the HDCEP during WW2. Our conference members were excited to view the complete gas proofing gear inside the underground complex, as well as an original plotting room table. We then walked as a group to the partially destroyed AA battery (three 3-inch AA) at the water's edge. Returning to our buses, we drove down to Battery #226 (two 6-inch shielded BC) which is currently abandoned and has been proposed for destruction by the navy. We were not allowed to go inside the battery due to health concerns. We walked about 100 yards to view a 180-degree Panama mount that was once part of Battery U (four 155 mm PM). The other three are buried or destroyed, as this area is now army family housing. Walking about 100 more yards, we viewed the concrete base for a turntable for a 12-inch railway gun. This concrete circle is now part of a playground.



Battery Pennington is a one-of-a-kind 16-inch howitzer battery employing the "dispersed" method of defense against warship bombardment, so visualizing all the various structures can be difficult. (USARCE RCW)



Rare color photograph of Battery Pennington during target practice in 1941, note no protection from aerial bombardment. (NARA)



The U.S. Navy has proposed destroying this magazine for Battery Walke's Emplacement #4 as they have no use for this structure. (McGovern Collection)



CDSG members attempt to see inside Battery Pennington's power house #1. (McGovern Collection)

We then walked about 200 yards to Battery Cramer (two 6-inch shielded BC) which is used today for storage. We were able to circle the battery, but not to visit the interior due to current usage. We rejoined our buses at this point which took us to JEB Fort Story's MWR campground and cabins.

Battery Pennington was the only primary battery we were able to visit during our tour, and this was restricted to the portion of the battery outside the "training ranges." This one-of-a-kind coastal gun battery, completed in 1922, had four 16-inch M1920 howitzers on M1920 howitzer carriages. Four circular open concrete pads each connected to two sets of magazines and shell rooms forming the battery infrastructure. Two detached powerhouses furnished electrical power to the battery. Standard-gauge railroad tracks and switches connected the magazines, shell rooms, and gun emplacements together and the gun emplacements were also connected by the rail system so any set of magazines and shell rooms could service any gun emplacement. The shell rooms were designed so that the rail tracks ran down through the middle of the building, allowing loading the heavy 16-inch shells directly onto the rail shell carriers. The magazines were designed so that rail tracks ran on each side of the building and three roll-up steel doors on each side gave handlers easy access to the large powder bags. Behind Emplacement #3, a 280-foot tunnel through a large

sand dune led to combination plotting room and switchboard room. This tunnel was 15 feet high and 14 feet wide, with railroad tracks through it, allowing railroad artillery to be sheltered inside. Operationally, the battery was divided into two batteries of two howitzers each and they were originally called Battery Pennington A & B. Emplacements #3 and #4 were renamed Battery Walke in 1940. The area that encompassed Emplacement #4 is now a RV campground so we had full access to the remains of the battery in this area. With field lunch in hand, we explored the concrete gun emplacement and visited the two magazines and one shell room. The other is behind the "training ranges" fence. Boarding the buses, we drove by Battery Worcester (two 6-inch BC) which was a prototype for the #200 Construction Series, for a "drive-by" photo opportunity. We then drove through the army's current housing area that destroyed all the structures that made up of Emplacement #3, except for one shell room behind the "training ranges" fence. We stopped at the fence to view this shell room and behind it the tunnel that runs to the plotting and switchboard room. We disembarked our buses to visit a shell room and magazine that belonged to Emplacement #2. The rest of Emplacement #2's structures and all of Emplacement #1's structures remain in place, but behind the "training ranges" fences. We were able to walk to and around Power House #2. We then proceed out Gate 8 and said our thanks to our hosts.

JEB Fort Story is now under the control of the U.S. Navy, so its WW2 history may be less well appreciated, nor is there a requirement that they preserve these structures. The Navy has recently proposed destroying 15 structures that date from when the fort was a coast artillery post. The Navy has asked CDSG for their comments about this plan and we have provided a written response. The key structures they wish to destroy are Battery #226 (Bldg. 217) and one of Battery Walke's powder magazine (Bldg. 405). We visited these structures during our tour and the only reason the navy is seeking to destroy them they are currently not being used. We hope the Navy decides not to destroy these historic structures!! Many of the coast defense structures we visited during our 2000 conference (12 out of 20 sites) are now off limits to us, as they are deemed to be in "training ranges." We do not have the visibility we once had on how these structures are being treated. We have conveyed to the Navy the historical importance of these structures. The CDSG is also working on plans to bring



CDSG 2019 Annual Conference group picture taken at the USACE Norfolk District headquarters, Fort Norfolk, VA (McGovern Collection)

USS *Iowa*'s 16-inch/50 battleship barrel #270 to Cape Henry as a static display to highlight the base's coast defense history.

Our chartered buses took us to downtown Norfolk, where we made our way to Fort Norfolk, which dates from the 1st system with a major rebuilding during the 2nd system. This small fort defended the entrance to the Elizabeth River, along with Fort Nelson, which no longer exists. Fort Norfolk has served as the district office for the U.S. Army Engineer District, Norfolk, since 1923, though they built a large office building next to the fort in 1983 for their primary offices. COL (Ret'd) Paul Olson, a CDSG member and former commander of the USACE district, arranged access to the fort and gave us a great tour in the rain. Back onboard our buses we headed back to our conference hotel.

After having dinner on their own, our members gathered for our conference orientation and nightly presentations at 7 p.m. in the hotel's primary meeting room. Excellent presentations were given by Quent Schillare (Update on our Next Annual Conference in NOLA), Mike Cobb (Fort Wool: Star Spangled Banner Rising), Glen Williford (Japanese Photos of the Harbor Defenses of Manila Bay & Boer War / Zulu War sites), and Matt Bell (Fort Casey's 10-inch Guns). The buying/selling of coast defense books and documents was concluded with the CDSG Fund holding a live auction of several key coast defense documents and artifacts. The CDSG Fund silent auction ended and books were exchanged for donations.

Sunday, April 14

After checking out of their hotel rooms, our members drove their own cars to downtown Hampton. Our charter boat, "*Miss Hampton II*," awaited us for our 8 a.m. departure to Fort Wool on Rip Raps Island, a small (15-acre) artificial island southeast of Fort Monroe. First named Fort Calhoun (or Castle Calhoun) and renamed Fort Wool during the U.S. Civil War, it was started in 1819 as a three-tier stone fort but was never completed as a 3rd System fort due to continuing subsidence. Rebuilt as an Endicott-Taft fort and modernized during WW2, it became a Hampton City Park in 1970. We were greeted by Mike Cobb, the former historian for the City of Hampton, who led us on a tour of the fort. The charter boat was able to land us on the fort's dock after a 45-minute trip. Our members either followed Mike



Fort Wool on Rip Raps Island, Hampton, VA. WW2 Battery Gates (two 6-inch shielded BC) in the foreground with the two Endicott-Taft 6-inch disappearing gun batteries in the middle and the remaining 3rd-System casemates in the background with the two 3-inch rapid-fire batteries. (McGovern Collection)



Battery Gates' BC station is a concrete station with CRF on the roof, on a steel tower at Fort Wool. The roof is hinging forward as the steel supports on the observation windows is rusting away. (McGovern Collection)



Closeup of the rusting steel supports for the observation window at the mine station at Fort Wool, VA. This problem has become widespread with battery commanders, CRF, and fire control stations. Without replacement supports these structures will collapse. (McGovern Collection)

for a guided tour or independently explored the island fort. One of the most interesting structures is Battery Gates (two 6-inch shielded guns) constructed during WW2 as two-level battery. Although most WW2 6-inch batteries were only one level, this was due to the lack of space on the island. This battery made use of the Endicott-Taft 6-inch emplacement, also named Battery Gates (two 6-inch DC), by incorporating its magazines into the WW2 battery. The battery's BC station remains on a very rare steel tower to the rear of the battery (only one other survives today). Next to the battery are also concrete emplacements for .50-caliber AA guns. Continuing westward are Battery Dyer (two 6-inch DC) and Battery Claiborne (two 6-inch DC) with an interesting power station in the transverse between the two batteries. Reaching the eastern end of the island, we visited Battery Lee (four 3-inch P) and Battery Hindman (two 3-inch P), as well as the remaining eight 3rd-System gun casemates. Above the casemates are the beginnings of the second tier of casemates and a WW2 mine control station. We gathered at the dock at Noon to return to downtown Hampton.

Fort Wool is owned by the Commonwealth of Virginia and leased to the City of Hampton. Neither government provides much funding for the preservation and interpretation of Fort Wool. Mike Cobb has become the "keeper" of the fort and he has tried to stabilize the fort, such structures as Battery Gates' BC tower, and the 3rd-System casemates, to the best of his personal ability. The fort needs much more resources to save these rare structures. Mike has asked the CDSG Fund and its members to help him. What can you and the CDSG do to help Mike Cobb save Fort Wool? Please let us know or reach out directly to Mike Cobb at johncobbjachin@gmail.com.

Back at the dock, our conference members headed to independent lunches before driving to Newport News to visit the Virginia War Museum, which has a large artillery collection. Much attention was given to the 6-pounder (2.24-inch) American Ordnance M1900 gun No. 36, on M1898 wheeled carriage, and the 5-inch M1897 Bethlehem gun No. 3 without carriage (formerly emplaced at Battery Boutelle, Fort Winfield Scott), as both were coast artillery guns. By 3 p.m., conference members had completed their inspection of the museum's collections and begun their travels home, or visits to some other military sites in the area, such as Fort Eustis, Yorktown Battlefield, Fort Boykin, Fort Powhatan, USS *Wisconsin*, McArthur Memorial, Naval Station Norfolk, etc., as the 2019 CDSG Annual Conference came to an end.

The CDSG would like to thank each of the site owners/managers for allowing us to visit their former coast defense structures. This includes Robert Kelly, Robin Reed, Glen Oder, Jeff Pasquino, Terry Brown, Aaron Firth, Dom Hall, and Richard Cox for our tours at Fort Monroe. Key to our tour to Fort John Custis and Fisherman Island MR wer Bob Leffel, Stacey Lowe, and John Griffith. At Camp Pendleton, we want to thank LTC Timothy Pillion, Susan Smead, and her team. We greatly appreciated the efforts of Capt.(USN) Joey Frantzen, Heather Lawrence, and Scott Mohr to accommodate our tour at JEB Fort Story, given their operational needs. Our tour of Fort Norfolk was completely due to Paul Olsen's efforts. We owe thanks to Mike



5-inch M1897 barrel on display at the Virginia War Museum in Newport News, VA. (McGovern Collection)



6-pounder gun on display at the Virginia War Museum in Newport News, VA. (McGovern Collection)

Cobb for allowing us a long (3-hour) tour of Fort Wool. At the Virginia War Museum, we can thank Chris Garcia for arranging our group tour. The CDSG appreciates the additional support of the folks at VisitNorfolk, Venture Tours, and Hampton Fleet for assisting in hotel selection, bus charters, and boat charter. We also want to thank each of the presenters for their willingness to share their knowledge and their effort to prepare presentations. Finally, thanks to the staff at the Quality Suites/Sleep Inn Lake Wright for supporting our conference.

On the CDSG side, we want to thank the 2019 CDSG Annual Conference Committee for donating their time and efforts to make the conference a success. The committee members were Terry McGovern (Chairman), Ned Libby, Mark Berhow, Quentin Schillare, and David Kirchner.

Attending the conference were Alise Arnold, Tom Batha, Matthew Bell, Mark Berhow, Gordon Bliss, Charles and Mary Ann Bogart, Jillian and Robert Creedon, Tina Cronc, Nigel Cunningham, Phyllis Daen, Roger Davis, Craig and Julie Ann Dyson, Mike Fleming, Dale Floyd, Karl Fritz, Alan Fyson, William Gravel, Bennett Grills, Robert Grimm, Charles Gutch, Alexander Hall, David Hancock, Ralph Hansen, Alan Hardey, John Harris, Roy Hatanaka, Kenneth Jones, Nathan Jones, Tom Kavanagh, David Kirchner, David Larsen, Craig Lentz, Edmund Libby, Daniel Lindley, Scott Loomer, Danny and Michael Malone, Terrence McGovern, Glen Milam, James Moore, Bruce and Scott Nordmark, Paul Olsen, Gary Paliwoda, George Petronis, Paul Prentiss, James and Maryjane Rhet, William Ricker, Christine Robinson, Dean Robinson, Beverley and Lawrence Rouse, Richard Schilb, Quentin Schillare, John Scholes, Marshall Snyder, Michael van Best, Steven Waldron, Mary Angela and Robert Walk, John Weaver, Shawn Welch, Glen Williford, Harry Winn, Ian Wolfe, Richard Wong, and Charles Woodman.

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CDSG Fund

The CDSG Fund supports the efforts of the Coast Defense Study Group by raising funds for preservation and interpretation of American seacoast defenses. The CDSG Fund is seeking donations for projects supporting its goals.

Visit the CDSG.ORG website for more details.

The goals of the CDSG and CDSG Fund are the following:

- * Educational study of coast defenses
- * Technical research and documentation of coast defenses
- * Preservation of coast defense sites, equipment, and records for current and future generations
- * Accurate coast defense site interpretations
- * Assistance to groups interested in preservation and interpretation of coast defense sites

Donations are tax-deductible for federal tax purposes as the CDSG is a 501(c)(3) organization, and 100% of your gift will go to project grants. Major contributions are acknowledged annually. Make checks or money orders payable in US funds to: Coast Defense Study Group Fund or the CDSG Fund. Donations can also be made by credit card through the CDSG website at www.cdsg.org.

The Fund is always seeking proposals for the monetary support of preservation and interpretation projects at former coast defense sites and museums. A one-page proposal briefly describing the site, the organization doing the work, and the proposed work or outcome should be sent to the address below. Successful proposals are usually distinct projects rather than general requests for donations. Ideally, we desire to fund several \$500 to \$1,500 grants per year. Upon conclusion of a project a short report suitable for publication in the CDSG *Newsletter* is requested. The trustees shall review such requests and pass their recommendation onto

the CDSG Board of Directors for approval. The trustees for the CDSG Fund are Terry McGovern, Quentin Schillare and Mark Berhow.

Send donations to (and made out to):

CDSG Fund c/o Quentin Schillare

24624 W. 96th Street, Lenexa, KS 66227-7285 USA

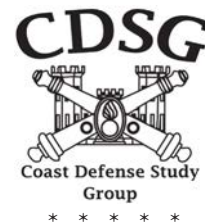
Or use your credit card via PayPal on the www.cdsg.org website.

Send Fund Project requests to:

CDSG Fund c/o Terry McGovern

1700 Oak Lane, McLean, VA 22101-3326 USA

Please prepare a written request of your need and how your request relates to the goals of the CDSG.



CDSG Logo Hats, Shirts & Patches

The CDSG is pleased to offer custom-made hats, T-shirts and patches to our membership. Wearing these hats, T-shirts and patches are a great way to make others aware of the CDSG and its goals. It is also an excellent way to promote new memberships in the CDSG.

The CDSG patches have been available for several years. Designed especially for the CDSG, these quality patches combine the Coast Artillery Corps and the Corps of Engineers symbols to reflect their involvement in U.S. coastal defenses. This logo is now on hats and a set of T-shirts which are great for showing the CDSG "flag."

To order your hat, T-shirt or patch, please complete the order form below and send it along with your check (made out to CDSG, Inc.) to Terry McGovern at 1700 Oak Lane, McLean, VA 22101-3326 USA (e-mail: tcmcgovern@att.net).

CDSG hats, T-shirts and patches ordering information

Black T-shirt with white ink:

Size & # ___L ___XL ___2XL ___3XL

Red T-Shirt with white ink:

Size & # ___L ___XL ___2XL ___3XL

Kacki T-Shirt with black ink:

Size & # ___L ___XL ___2XL ___3XL

Navy T-shirt with yellow ink:

Size & # ___L ___XL ___2XL ___3XL

Total Number: ___ times \$ _____ = Total \$ _____
(domestic \$18/overseas \$26 each)

CDSG Cloth Patch: ___ times \$ _____ = Total \$ _____
(domestic \$4/overseas \$6) each

CDSG Color Decal: ___ times \$ _____ = Total \$ _____
(domestic \$2/overseas \$3) each

Hats: ___ times \$ _____ = Total \$ _____
(domestic \$20/overseas \$25) each

Be sure to include your name and shipping address.

You can also order online at cdsg.org/shopping/

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A Visit to Fort Michie Great Gull Island, NY

By Terry McGovern

On May 31 to June 1st, 2019, we had the opportunity to visit the former Fort Michie on Great Gull Island, New York. As you might know, Fort Michie was a US Army coastal defense site from 1897 to 1946. Along with Fort H. G. Wright, Fort Terry, Fort Tyler, Fort Mansfield, and Camp Hero, the fort defended the eastern entrance to Long Island Sound as part of the Harbor Defenses of Long Island Sound, thus defending Connecticut's ports and the north shore of Long Island. Access to this small island is by invitation only using a private charter boat out of Novak, CT for a 45-minute boat ride each way.

The fort was named after 1st Lt. Dennis Michie, killed at San Juan Hill during the Spanish-American War. The fort was first



Harbor defenses for Eastern Long Island Sound. NARA.

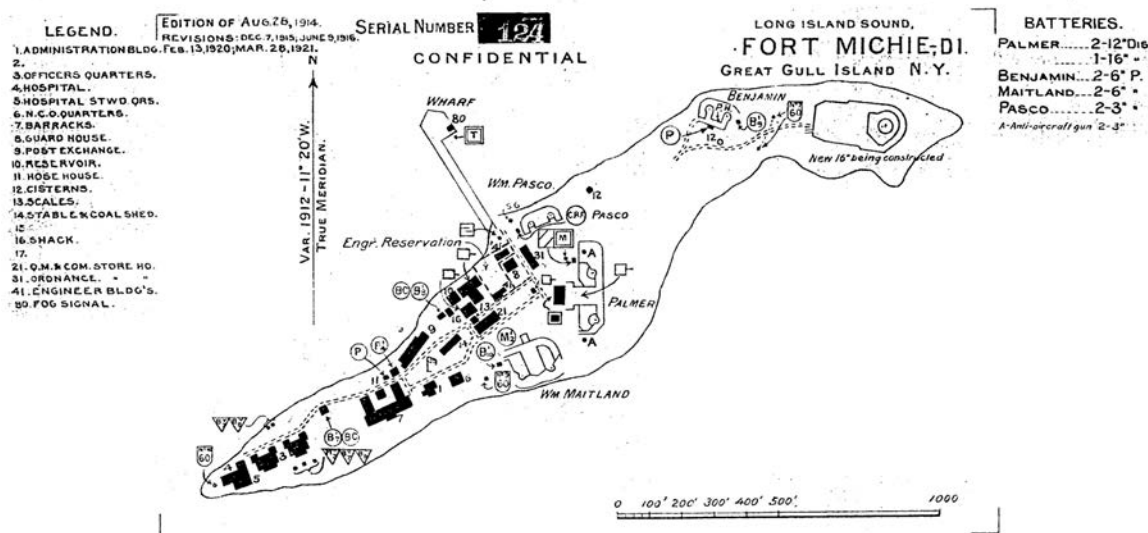
developed on Great Gull Island (only 17 acres in total size) due to its key location at the Race, where Long Island Sound meets Block Island Sound. As part of the Endicott Program, the Corps of Engineers undertook construction in 1897.

By 1908 the following batteries were completed:

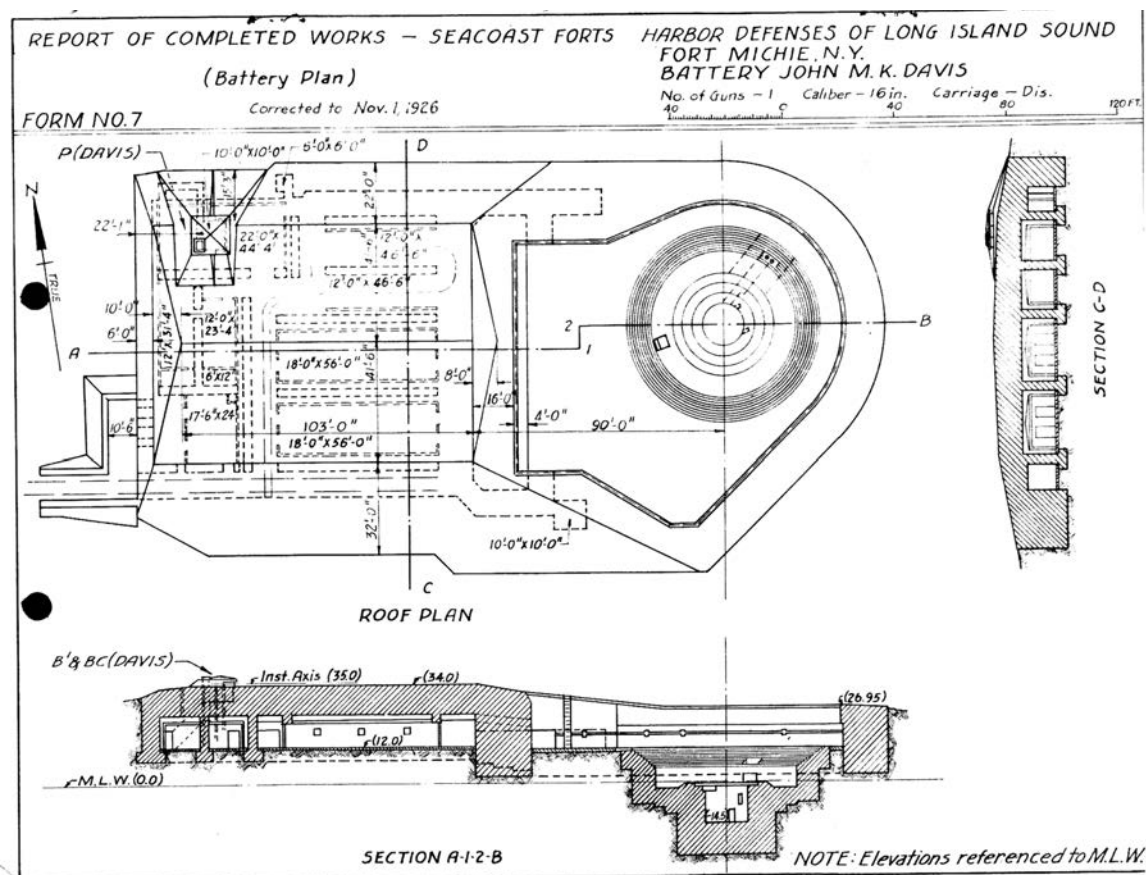
Name	No. of guns	Gun type, Carriage type, Years active
Palmer	2	12-inch gun M1895, disappearing M1897, 1900-1945
North	2	10-inch gun M1888, disappearing M1896, 1900-1917
Benjamin	2	6-inch gun M1900, ped M1900, 1908-1947
Maitland	2	6-inch gun M1900, ped M1900, 1908-1947
Pasco	2	3-inch gun M1903, ped M1903, 1905-1933

Following the American entry into World War I in April 1917, changes were made at the stateside forts with a view to putting some coast artillery weapons into the fight on the Western Front. Battery North's pair of 10-inch guns was dismantled in August 1917 for potential use as railway artillery, but the guns did not leave the island during the war. Battery North's guns were shipped to storage and the battery demolished to make room for a new gun emplacement.

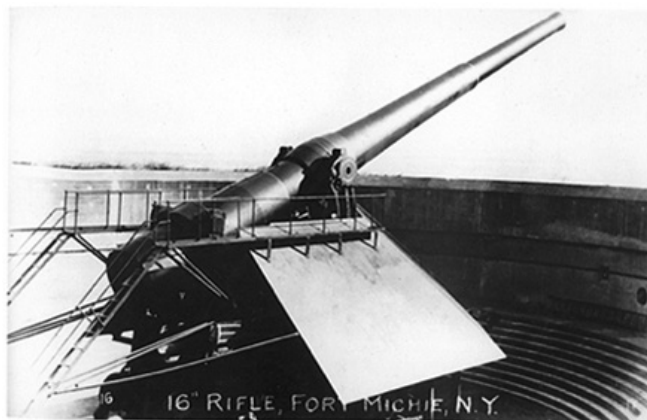
During World War I the new M1919 16-inch gun was developed, at the time the most powerful weapon in the US arsenal. The first of these was deployed at Fort Michie on a unique M1917 Buffington-Crozier disappearing carriage, with the elevation of 30 degrees and a rare all-around-fire emplacement. This was the largest single gun emplacement constructed by the United States at that time. It was named for John Moore Kelso Davis, a general and Civil War veteran who died in 1920. It was a single-story battery with the gun and the magazine on the same level. The carriage was equipped with retracting, traversing, and elevating electric motors. This open battery was not casemated, but within the battery was a plotting room with the BC station directly above it, connected by stairs and a voice tube. Electrical power was furnished by an emplacement power plant with three 25 kW gasoline-powered motor generator sets, interconnected with three other emplacement power plants. Also inside the battery was a mining casemate. Battery Davis was constructed during 1919-1922 with its transfer to the Coast Artillery Corp occurring in 1923.



1921 site map for Fort Michie on Great Gull Island, NY. NARA.



RCW for Battery John M.K. Davis, 1926. NARA.



Battery Davis and the 16-inch M1919 gun on M1917 disappearing carriage. *NARA*.

In 1933 the pair of 3-inch guns in Battery Pasco were sent to Fort Mills on Corregidor in the Philippines and not replaced. The fort's buildings were destroyed in the 1938 New England Hurricane; only the flagpole was listed as surviving. The fort was probably in caretaker status at the time with little or no garrison.

In 1940, when the United States reviewed its coast defense needs in earnest, Fort Michie was relegated to a secondary role. The fort lacked protection against air attack, and even its 16-inch gun had a relatively short range due to the obsolescent disappearing carriage. New long-range carriages for 16-inch guns were developed about the time Fort Michie's emplacement was built. However, due to the need for a garrison of almost 500 men, nu-



Recent view of Battery Davis (16-inch DC) on Great Gull Island. Emplacement for 90 mm AMTB gun is in the foreground. *McGovern Collection.*



Recent view of Battery Davis (16-inch DC), looking at the loading platform with the gun well full of water and entrance to the magazines near the back wall.
McGovern Collection.



12-inch disappearing gun at Battery Palmer during gun drill in the 1930s. NARA.



Recent view of Battery Palmer's 12-inch DC loading platform. Note extensive spalling of parapet walls. McGovern Collection.



Recent view of Great Gull Island looking from West to East. In the background is Little Gull Island.

McGovern Collection.

merous temporary buildings were constructed in early 1941. The defense of Long Island Sound centered on building two batteries of two 16-inch guns each at Camp Hero in Montauk, with a third battery at Fort H. G. Wright on Fishers Island that stopped just short of completion. In 1944, with the batteries at Camp Hero complete, Battery Davis was taken out of service; Battery Palmer followed soon after. The only battery built at Fort Michie during the war was Anti-Motor Torpedo Boat battery (AMTB) 912 in 1943, with four 90 mm guns on dual-purpose mounts, two fixed

and two mobile mounts. Concrete pads for both fixed guns were laid in front of Battery Davis. Fort Michie was disarmed and all its guns scrapped in 1946 and two years later it was abandoned. The American Museum of Natural History acquired the island in 1949 to study migratory terns, which it has continued to this day.

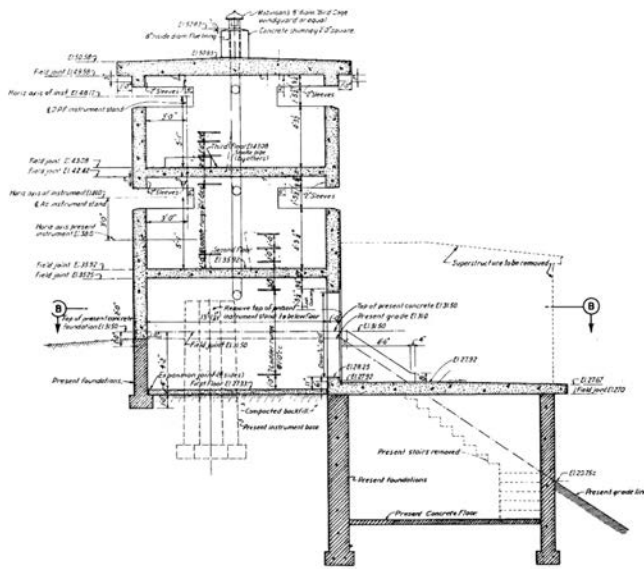
The directress of the Great Gull Island Tern Project is Helen Hays, the driving spirit of the tern program who celebrated her 50th anniversary running the program in 2018. Every year she organizes volunteers to work and stay on the island to mark Roseate and Common Tern nests with numbered tongue depressors: Common Terns the last weekend in May and the first weekend in June; Roseate Terns at the end of the first week in June. Once the tongue depressors are in place for Common Terns, a team marks each nest with a four-foot orange fiberglass dowel. When vegetation grows up around the nest, the dowels enable checkers to find the nest to band the chicks at hatching. Most Roseate nests are under the large boulders stabilizing the shoreline of the island, or on military retaining walls in relatively open sites, and do not need dowels. When the chicks hatch, volunteers band them and begin trapping the adults on these nests. Most of the nests hatch the last two weeks in June, however hatching continues in a few nests through about August 10. The volunteers also need to clear vegetation every year so the terns can have a nesting area to their tastes. The hard work of Helen and the volunteers over the years have allowed the tern nesting population to grow to the largest concentration of nesting Common Terns in the world, 9,500 pairs. The island also hosts nesting sites for 1,300 pairs of Roseate Terns, the largest nesting concentration of this endangered species in the Western Hemisphere.

Living on the island is very basic, with neither running water nor commercial electrical power. All supplies are offloaded on the dock and transported to the former mine casemate, which is now the headquarters for the GGI Tern Project. Team members cook meals while staying in bunks with sleeping bags in the few remaining CAC buildings. Sharing the island with 20,000 terns during the nesting season is not easy, as the terns are very protective of their nests and attack in mass, using their beaks, while at the same time they enjoy defecating on visitors. The "bird" people are very dedicated to their mission to study terns and to promote their population, similar to "fort" people who are dedicated to their mission to study fortifications and promote their preservation.

The surviving military structures on the island are aging quickly due to the lack of maintenance. Rusting of steel due to sea spray and the spalling and cracking of concrete due to vegetation growth and the "freeze-thaw" effect has led to a rapid decline. This is especially true for the remaining fire control and searchlight stations, as they are also subject to wave action during storms that directly break over them. The GGI Tern project is focused on what is best for the terns, which would be a flat sandy island. They "maintain" the military structures as little as possible and only for their needs. Of particular concern is WW2 fire control structure I-E, a three-story tower that allows for 330-degree visibility with ceilings supported by several small steel posts on the observation windows. These steel posts have rusted through and the only reason the tower has not collapsed has been wooden

blocks and steel pipes that have been jammed into the observation windows. These temporary measures are aging and will soon fail. The CDSG Fund has offered to provide a grant to AMNH toward

a more permanent solution so this tower can be stabilized. This project is time sensitive as several other fire control structures on the island have already collapsed.



Fire control structure I-E constructed on top of existing FC station 1943-44. NARA.



Recent view of fire control structure I-E located behind Battery Maitland on Great Gull Island. McGovern Collection.



Fire control tower I-E showing temporary wooden blocks and steel pipes supporting the ceiling. Original steel posts have rusted away. McGovern Collection.



Great Gull Island Tern Project headquarters (former Mine Casemate) behind Battery Palmer. McGovern Collection.



Former controlled mine operations room, now the main office/work area for the GGI Tern Project. McGovern Collection.



Helen Hays, Director of the GGI Tern Project for AMNH for the last 51 years, in the "mess." McGovern Collection.



Two GGI Tern Project volunteers wear protective headgear outside the headquarters. Tern attack the highest point, so the flowers become the targets instead of visitor's heads, while the straw hats limit the impact of defecations. *McGovern Collection.*

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Forts Pickens, Barrancas, and George at Pensacola, Florida

Charles H. Bogart

Illustrations by author.

From Panama Beach, we drove to Pensacola Beach, on Santa Rosa Island. Here we visited Forts Pickens, and from there we went to Fort Barrancas, the Advanced Redoubt, and Fort George. February is, in one way, a good time of the year to visit these fortifications; almost no one is at these sites and the weather is comparatively mild. It is also a bad time to visit, since portions of the sites are closed due to a lack of seasonal employees.

We first visited Fort Pickens, a Third-System fort, with its accompanying Endicott and World War II batteries. There is a fee to visit Fort Pickens; however, more years ago than I would like to count I bought a Golden Age Passport. This has paid for itself ten times over since I purchased it, getting us into National



Inside one of Fort Pickens' casemates.



Battery Truman.

Parks and Monuments for free. All of Fort Pickens was open for exploration with the exception of Battery Cooper, with its 6-inch disappearing gun, and Battery 234, with its two 6-inch guns, the two sites I most wanted to visit. However, we made do with a walk through Fort Pickens and explored the outsides of Batteries Truman, Payne, Pensacola, and Worth. Battery Langdon was sealed off, and Batteries Cullum, Sevier, and Van Swearingen were locked behind chain link fences. All three of these batteries have suffered serious structural damage from salt water that has



Third-System Fort Pickens.



A Fort Pickens' Endicott-Period gun line.