NOTE

This file is **Part 2** of a two-part digital document comprising the entirety of:

Documentation of Contributing Elements, Fort Slocum Historic and Archeological District, Davids Island, City of New Rochelle, Westchester County, New York, Volume 5: Buildings 110-128A, Including the Mortar Battery (Battery Haskin-Overton, Buildings 125-127), Rev. 1, January 2010. Prepared by Tetra Tech EC, Inc., Boston, for the U.S. Army Corps of Engineers, New England District, Concord, Massachusetts.

This PDF version of the document was prepared from the source digital files in February 2010.

DAVIDS ISLAND – FORT SLOCUM HISTORICAL DOCUMENTATION

NIKE SIGHTING STATION (BUILDING 124)

Location:	Davids Island–Fort Slocum 0.6 mi southeast of New Rochelle, New York mainland USGS Mount Vernon, NY Quadrangle UTM Coordinate (NAD 1983): 18.603650.4526258
Present Owner(s):	City of New Rochelle, NY
Date of Construction:	1954
Architect/Engineer:	U.S. Army Corps of Engineers
Present Use:	Abandoned when documented (2004-2007). Demolished 2008
Significance:	The Nike Sighting Station (Building 124) is situated in the Defense and Support Area, where it provided command and control facilities for Fort Slocum's Nike missile battery (active 1955-1960). It is representative of Fort Slocum's participation in a system of antiaircraft defenses built around New York City during the early period of the Cold War (1947-1963). The building is a contributing element to the Fort Slocum Historic and Archeological District.
Project Information:	The U.S. Army Corps of Engineers, New York District (Corps), has been authorized under the Department of Defense Appropriations Act, 2004, to perform building demolition, debris removal, and remediation of asbestos materials (Project) at the Fort Slocum on Davids Island in the City of New Rochelle, New York. The purpose of the Project is to remove buildings and infrastructure from the abandoned fort installation that create safety hazards as part of a long-range plan to restore Davids Island for future use. In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800), the Corps has consulted with the New York State Historic Preservation Officer (NYSHPO) regarding the effects of the Project on historic properties. The consultation resulted in the development of a Memorandum of Agreement (MOA) among the Corps, NYSHPO, County of Westchester, and City of New Rochelle as consulting parties. This documentation report was prepared in accordance with Stipulation II.C.1 of the MOA.
Prepared by:	C.L. Borstel, J.C. Sexton, R.M. Jacoby, S.B. Marshall, and C.W. Christopher
Title:	Cultural Resources Documentation Team
Affiliation:	Tetra Tech EC, Inc., Morris Plains, NJ
Date:	April 2007 (Revision 1, January 2010)

PART I. DESCRIPTION

The Nike Sighting Station (Building 124) is located near the southern end of Davids Island on top of the Mortar Battery earthwork (Battery Haskin-Overton, Buildings 125-127). The island is in the western portion of Long Island Sound, 0.6 miles southeast of the New Rochelle, NY, mainland, and 19 miles northeast of Midtown Manhattan (Location Map and Site Map). Davids Island is a roughly pear-shaped, relatively flat landmass consisting of approximately 78 acres above mean high water. It is heavily wooded and contains the ruins of more than 100 buildings and structures associated with the now-abandoned U.S. Army post, Fort Slocum. The ruins include barracks and quarters; quartermaster, administrative, medical, and recreation buildings; and coastal and air defense facilities. A concrete and stone seawall encircles most of the shore, and a system of roads and paths runs throughout the island. Building 124 is located in the central portion of the Defense and Support Area. This section of Fort Slocum is a functionally-mixed area that adjoins and includes the 1891-1897 coastal artillery Mortar Battery.

Building 124 is one of several buildings and structures that remain from the Integrated Fire Control Area of Fort Slocum's Nike antiaircraft missile battery, which was active from 1955 to 1960 (Photos 1-4; Figures 1-4). This complex occupies the southern half of the post's former coastal artillery mortar battery and an adjacent area immediately to the west. Building 124 stands on the narrow, earth ridge between Pit A of the old fortification's Battery Haskin (Building 125), to the east, and Pit B (Building 126) of that battery, to the west. Originally, the walls of the two pits rose to an arris-like crest, but the crest was graded and reduced in height in the 1920s, creating the narrow platform on which Building 124 was erected three decades later. (The pits and other elements of the Mortar Battery are documented separately elsewhere in Volume 5 of *Documentation of Contributing Elements, Fort Slocum Historic and Archeological District, Davids Island, City of New Rochelle, New York.*)

Historic architectural inventories of Fort Slocum completed in 1985 and 2005 (Berger 1985; Olausen et al. 2005) refer to Building 124 as the "Nike Sighting Station," the name used here. When the Nike battery was active, however, this structure would have been called Battery Control. The masonry building documented here was the fixed, permanent core section of a larger structure that included mobile trailers extending from its north and south sides. These trailers were removed when Fort Slocum's Nike battery was decommissioned, and had been absent for several decades by the time Building 124 was inventoried and documented.

Building 124 is an unadorned, starkly functional building conforming to no named architectural style. It was designed for fast and economical construction and for a limited lifespan. The building is one story tall and has a gently sloping flat roof clad with rolled asphalt. It has concrete block exterior walls and stands on a concrete slab foundation. The building is in overall fair condition, but there is considerable damage due to vandalism and weather.

The building has a cross-like floor plan comprised of a wide rectangular body, approximately 22 feet by 24 feet-4 inches, with its longer axis oriented southeast-northwest, to span most of the space between the two adjoining mortar pits. Docking bays, each of which measures 5 feet-4 inches by 7 feet-4 inches, extend from the northeastern and southwestern sides of the building. Outside the building, each bay is adjoined by an at-grade concrete slab. The battery control trailer and an additional equipment trailer attached to the building's fixed masonry core from the bays (Photos 1 and 3; Figures 2-3). Each bay is resembles a concrete-block porch, with a full wall on the east and large openings occupying the western side and exterior end. Ghosting of roofing tar or other sealant on the exterior ends and historical

photographs show that the trailers abutted the wide end-faces of the docking bays. Remnants of wood framing indicate that doors were once present on the western sides of the bays. Overhead roll-up steel doors, slightly larger than normal pedestrian doors, occupy the entrances that connect the bays with the main part of the extant building.

In addition to the openings in the docking bays, the southwestern façade also has, to the west of its docking bay, two medium-size window openings set high in the wall. These are horizontally-oriented rectangular openings fitted with fixed screens, metal louvers, and steel sills. There are no window openings to the east of the bay in this façade. The northwestern façade features two door openings and two window openings. The doorways are situated near the center of the façade and at its southern end, and they contain remnants of wood-panel doors. A medium-size opening similar to those of the southwestern façade is located between the two doors, while a horizontal rectangular opening with a concrete sill and a wood frame window is located near the northern end of the façade. The building's northeastern façade has no openings other than those in the docking bay. The southeastern façade has at its center a single large horizontal window opening with concrete sill. This opening is divided by wood frames into a side-by-side pair of windows.

Several circuit breaker boxes, light switches, and lights are affixed to various walls around the exterior of the building. There are also various poles and pole bases of undetermined functions nearby outside the building. A pole-mounted steel cabinet containing electrical or communication connectors, a fuse bank, and other components is situated about 30 feet southwest of the building.

The interior of the building is divided into three rooms. Two of these, to the west, are smaller chambers, with separate exterior entrances. The third room runs the width of the building and connects the two docking bays. Ductwork for the building's substantial ventilation system was extant at the time of documentation.

PART II. HISTORICAL NARRATIVE

Fort Slocum

Davids Island is named for Thaddeus Davids (1816-1894), a New Rochelle ink manufacturer, who owned the island between 1856 and 1867. Davids was next-to-last in a line of private owners and lessees associated with the island between circa 1700 and the 1860s. During this period, the island was used primarily as farmland, but beginning probably in the 1840s, it also became a destination for excursionists who traveled by steamboat from New York and Brooklyn to picnic by the sea. The U.S. Army leased the island in 1862 and purchased it outright in 1867. In 1967, the federal government sold Davids Island to the City of New Rochelle, which sold it in turn the following year to Consolidated Edison Company of New York, Inc. Consolidated Edison returned ownership of most of the island to the city in 1976.

Two U.S. Army posts successively occupied Davids Island between 1862 and 1965. The earlier post was established as De Camp General Hospital in May 1862. The hospital treated wounded Union soldiers and, from 1863 onwards, also cared for Confederate prisoners of war. After the Civil War, the Army remained on the island, apparently using the post somewhat discontinuously as a hospital, mustering-out camp, and subdepot for recruits. By the early 1870s, the hastily-built wood frame buildings of the Civil

War had deteriorated badly, and in October 1874 the Army entirely withdrew from the island, beginning a hiatus in occupation of nearly four years.

The Army returned in July 1878, when Davids Island was designated as a principal depot of the General Recruiting Service, supplanting Governors Island off lower Manhattan in that role. Originally known simply as Davids Island, the Army formally named the post Fort Slocum in 1896 to honor Maj. Gen. Henry Warner Slocum (1827-1894), a prominent Union soldier and New York politician. Recruit intake and training was a primary function of the post well into the twentieth century. Fort Slocum also saw service as an overseas embarkation station; hosted Army specialty schools for bakers, transportation officers, chaplains, public affairs personnel, and military police; provided retraining for court-martialed soldiers; and was an administrative center for the Air Force. Coastal artillery batteries operated at the post around the beginning of the twentieth century. During the Cold War, Fort Slocum supported an air defense missile battery.

When the post closed in 1965, Fort Slocum's landscape integrated elements from different episodes of development into a campus-like whole. Several episodes of development were represented, particularly 1885-1910 and 1929-1940. A few wood frame buildings remained from the late 1870s and early 1880s, and at least nine such buildings represented the Second World War. However, of the more than 50 temporary wood frame buildings erected during the First World War, only a single, partial example survived. Most of the buildings at Fort Slocum followed standard Army plans, but Army personnel or outside professional architects also produced a few designs specifically for the post. The permanent buildings at Fort Slocum generally reflected conservative and eclectic interpretations of different currents in American architecture, producing an engaging mix of Colonial Revival, Neoclassical, Romanesque, and Italianate styles. The temporary buildings around the post were in contrast unadorned and starkly utilitarian, as they were designed principally for speed of construction.

The period after Fort Slocum closed in November 1965 saw severe deterioration of the former Army post. The City of New Rochelle repeatedly sought to redevelop Davids Island, at one time considering a Consolidated Edison proposal to build a nuclear power plant and later supporting proposals for luxury residences. None of these plans materialized. Neglect and vandalism took a heavy toll on the former post. By the first decade of the twenty-first century, the landscape was overgrown, and the more than 100 buildings and structures that once comprised Fort Slocum were in decay and ruin.

Detailed accounts of Fort Slocum's history can be found in the general historic overview to this documentation series (Tetra Tech 2008) and in Olausen et al. (2005), among other sources.

Nike Sighting Station (Building 124)

Building 124 is one of ten numbered and inventoried buildings and structures or structure components in the central part of Fort Slocum's Defense and Support Area. Historical analysis of the area as a whole indicates that it was a functionally-mixed zone containing weapons-related, light-industrial, and utility-infrastructure activities, as well as other functions that generally needed a degree of isolation from the rest of the post (Tetra Tech 2008). The functional area occupies the southeastern section of Davids Island and is centered on the 2.9-acre coastal artillery Mortar Battery (Battery Haskin-Overton, also designated as Buildings 125, 126, and 127). The battery was built between 1891 and 1897 and was operational until 1906. After the Mortar Battery was deactivated, it stood as a prominent landscape feature at Fort Slocum for many decades. It was altered in the 1920s when portions of a small golf course were built on it.

Further alterations took place in the 1940s with the demolition of the northeastern mortar pit for the construction of a 1,000-inch firing range. It returned to defensive service in the 1950s when portions of the fire-control section of a Nike Ajax antiaircraft missile battery were built on it. These elements included the Nike Sighting Station (Building 124), discussed here, and the Nike Generator Building (Building 127A), described elsewhere in this volume of the historic resources documentation.

Nike Ajax was the world's first operational, guided surface-to-air antiaircraft missile system. It was developed between 1945 and 1954 by the U.S. Army Ordnance Corps in conjunction with several leading defense contractors, including Bell Laboratories, Western Electric, and Douglas Aircraft Company. Operational deployment around key U.S. cities, industrial centers, and military installations began in 1954. A 1955 study placed protection of New York City second in national priority, preceded only by Washington, D.C., so the batteries around the city were among the first to be planned and built. Between 1955 and 1960, the Army constructed 19 missile batteries around New York, along with three radar stations and an area-wide defense control center. Generally sited 20 to 25 miles from lower Manhattan, the batteries encircled the city with a protective "ring of steel," as the system was sometimes called, providing the innermost defensive layer against a possible attack from high-altitude, nuclear-armed Soviet bombers. Beginning in 1958, Nike Ajax was gradually replaced with an updated version of the system, Nike Hercules, and many of the earlier batteries were converted to the newer weapons. (The Fort Slocum battery was not updated.) Advances achieved during the development of these antiaircraft systems formed the foundation from which the United States began to evolve its first anti-ballistic missile system, initially called Nike Zeus and subsequently known as Nike X, Sentinel, and Safeguard, from the late 1950s through the early 1970s (Cagle 1959; Chiles 2005; Lonnquest and Winkler 1996).

Individual Nike missile batteries were built from standard plans prepared by the U.S. Army Corps of Engineers and its contractors, which were modified as necessary to adapt to local conditions. Each battery comprised two functional areas separated by one-half to three miles, but connected by communication lines, roads, and an unobstructed line of sight. The principal features of the Integrated Fire Control (IFC) (or Battery Control) Area were the battery's radars, tracking facilities, and command center for firing the missiles. This area also served as the administrative center for the battery (Figures 1-4). The Launch Area primarily contained missile magazines and launchers, along with assembly and fueling areas. Typically, each area was relatively self-contained and had its own barracks, recreation facilities, storehouses, offices, and similar facilities (Carlson and Lyon 1996).

The first generation of Nike missiles, the Nike Ajax, incorporated volatile liquid-fuel propellants, delicate vacuum tube electronics, and conventional high-explosive fragmentation warheads that were intended to bring down a single enemy aircraft. This 1-foot diameter, 35-foot-long missile weighed 2,455 pounds at launch. It was capable of reaching a maximum speed of Mach 2.3 (1,679 miles per hour) and had a maximum altitude of 70,000 feet. Its range was a relatively short 25 to 30 miles (Lonquest and Miller 1996:165-176).

Nike Ajax missiles were controlled throughout their flight from the IFC Area. An engagement with hostile aircraft employed three radars located in the control area. The Nike system was originally designed as a mobile system, and the use of trailer-mounted radars at many of the early Nike batteries was partly a vestige of that concept. During an engagement, a long-range Low-Power Acquisition Radar (LOPAR) initially picked up an incoming target. As the target approached, its hostile nature would be established by signals that attempted to query an identify-friend-or-foe (IFF) transponder carried by friendly aircraft. While the battery commander was assessing whether a target was hostile, the second

radar, known as the target-tracking radar (TTR) would lock onto it and feed information on azimuth, elevation, and range into the targeting computer. The battery commander would select a missile for attacking the target, and the third radar, the Missile Tracking Radar (MTR) would lock onto the weapon. As the target came within range, the battery commander issued the order to launch the missile. Two seconds after the order, a solid fuel booster would ignite, accelerating the designated missile off its launch rail and sending it speeding toward its target. Once the missile was launched, the MTR received continuous data on the missile's flight. Information from the TTR provided updates on the target's course, and the targeting computer would generate a course to guide the missile to the target. At the moment of closest approach between the target and missile, the computer generated a burst signal to the three high-explosive warheads in the missile, causing them to explode in proximity to the target, destroying it (Lonquest and Miller 1996:168-169).

Nike Battery NY-15, based at Fort Slocum, was constructed in 1954-55 and was operational between 1955 and the end of 1960. Along with Battery NY-49 at Fort Tilden near the southern entrance to New York Harbor, Fort Slocum's Battery NY-15 was one of the two earliest Nike batteries in the New York Defense Area to become operational. Though hosted by Fort Slocum, command of the battery was separate from that of the post. The battery was first manned by Battery D of the U.S. Army 66th Anti-Aircraft Missile Battalion, and later by the 1st Battalion, 55th Artillery (Baldwin 1955; Bender 1999; New York Times 1961).

The battery was divided between two neighboring islands, and while the island location of the battery was unusual, the separation of the two functional areas was characteristic of the system. The IFC Area was situated at the southern end of Davids Island, on and adjacent to the Endicott-era coastal mortar battery. The Launch Area, armed with 20 Nike Ajax missiles, was located on the northern end of Hart Island, 1.5 miles to the southwest. Selection of these two islands for the battery undoubtedly simplified land acquisition issues, which were often a source of contention and expense during the deployment of the system. Davids Island was already a federal reservation, and Hart Island, where a prison and potter's field were then located, was owned by New York City (Bender 2000; Cagle 1959:181-194; Carlson and Lyon 1996:40-42, 53-68).

The IFC Area of Battery NY-15 comprised a mix of existing buildings and new construction. Nike facilities on Davids Island may have been constructed by Michael Contracting of Brooklyn, NY, which was responsible for the Hart Island section of the battery (McGowan 1954). A map of the post from 1961 indicates that two of the five Second World War-era temporary barracks adjoining the mortar battery on the west were located inside the "Nike Site Control Area" (Buildings 130 and 133). (Buildings 131, 134, and 135 are outside the boundary shown by that map.) New construction included the Sighting Station (Building 124), the Generator Building (Building 127A), three concrete pads used for the trailer-mounted radars (now unnumbered, but designated in ca. 1957-1961 as Buildings 122, 123, and 126), and probably a transformer vault (Building 127C) (Engineer Intelligence Division 1961; Office of Post Engineer 1949-1957).

The Nike Sighting Station was the command center of the battery. The building and its attached trailers together contained the radar controls, the tracking and targeting computers, plotting board, and the battery commander's post. Stations for the radar operator, computer operator, tracker, and battery commander were all located in the combined structure (Carlson and Lyon 1996:56-58; Cavanaugh 2007; Lowery 2007).

It is unknown whether when first completed the Nike Sighting Station was identified by a number in Fort Slocum's building inventory. However, in the 1957 revision of post's building numbering system, it became Building 124, the designation by which it has been known since.

PART III. SOURCES OF INFORMATION

Published Materials

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Lowery, Rich
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Olausen, Stephen, Matthew Kierstead, and Jeffrey Emidy
2005 *Historic Architectural Survey and National Register Evaluation, Davids Island/Fort Slocum New Rochelle, New York.* Submitted to Tetra Tech EC, Inc., Morris Plains, New Jersey. Submitted by PAL, Inc. Pawtucket, Rhode Island.

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Maps and Drawings

May 1949, revised through November 1957 "Fort Slocum, New Rochelle, N.Y., Electric Distribution System Primary Lines." Office of Post Engineer, Fort Slocum. On file at Tetra Tech EC, Inc., Morris Plains, NJ, from materials supplied by Consolidated Edison Company of New York, Inc.

December 1961 "Map of Fort Slocum (Davids Island), New Rochelle, N.Y." Prepared under the direction of the First Army Engineer by the Engineer Intelligence Division, Governors Island, New York. Record Group 92, National Archives, College Park, MD.

Aerial Photographs

(Except as noted, all photographs are on file at National Archives, College Park, Maryland. Digital copies examined for this research come from the Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.)

1924: Vertical aerial photograph of Davids Island. August 24.

1932: Low angle oblique aerial photograph of Davids Island. View north. January 11.

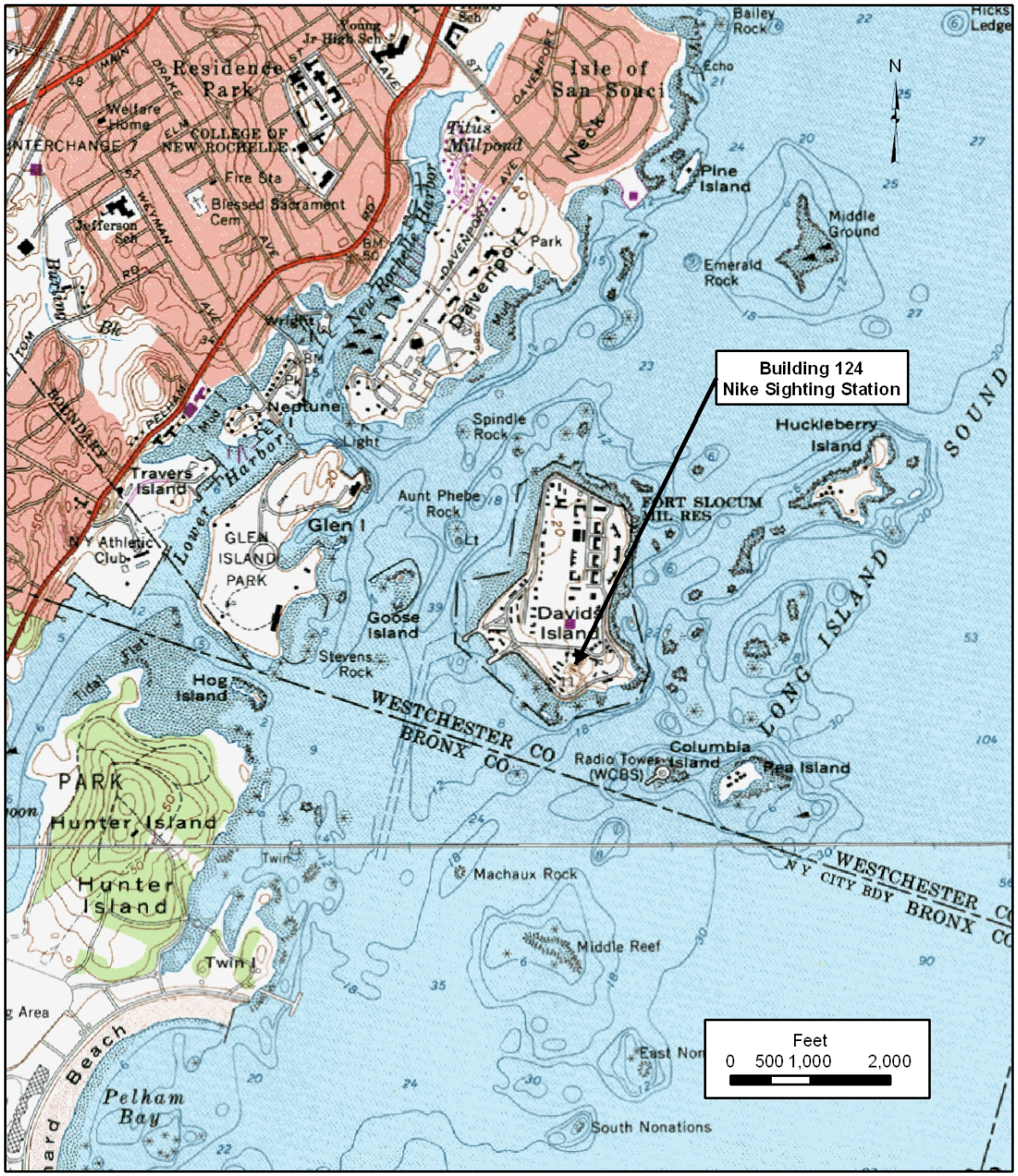
1940: Vertical aerial photograph of Davids Island. September 4.

1954: Vertical aerial photograph of Davids Island, New Rochelle, NY. Date and originating agency unknown. Available online in a georeferenced photo mosaic version through HistoricAerials.com at http://www.historicaerials.com. Accessed November 23, 2009.

ca. 1958: High angle oblique aerial photograph of Davids Island. View north. Summer. Included in a 1966 report prepared by Cross & Brown Co., New York, for the Federal Property Resources Service, on file at the New York City branch of the National Archives, Record Group 291.

1961: High angle oblique aerial photograph of Davids Island. View north. November 15. Attributed to Capt. Donald P. Blake. In the Fort Slocum Alumni and Friends Collection.

LOCATION MAP (USGS Mount Vernon, NY)
Scale: 1:24,000
1966 (Photorevised 1979)



SITE MAP

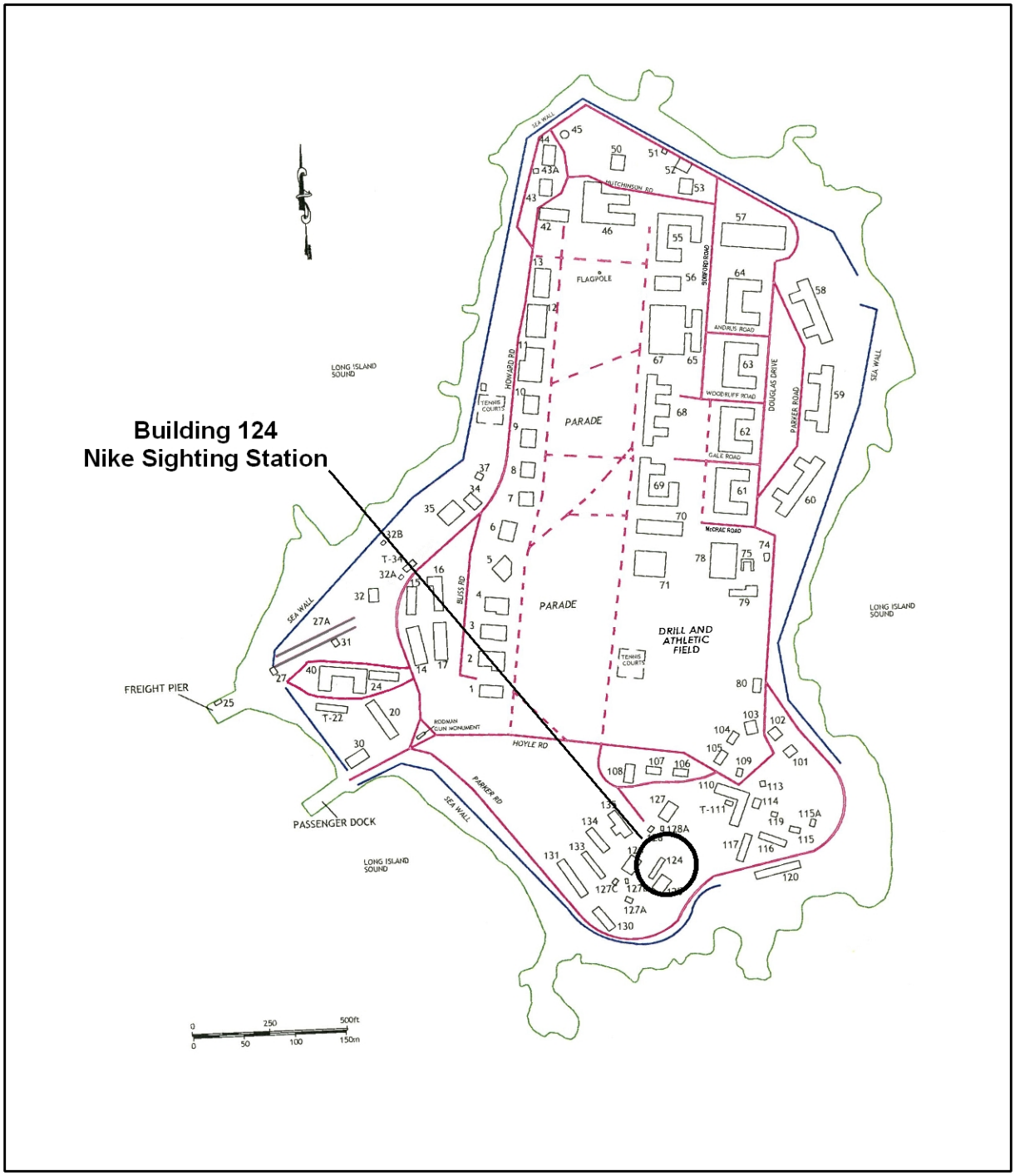

Building 124
Nike Sighting Station
PARADE
PARADE
DRILL AND ATHLETIC FIELD
FLAGPOLE
TENNIS COURTS
TENNIS COURTS
HUTCHINSON RD
HOWARD RD
BLISS RD
HOYLE RD
PARKER RD
SEA WALL
SEA WALL
SEA WALL
SEA WALL
STORRS ROAD
ANDRUS ROAD
WOODRUFF ROAD
GALE ROAD
McCRAE ROAD
DOUGLAS DRIVE
PARKER ROAD
RIDDMAN GUN MONUMENT
FREIGHT PIER
PASSENGER DOCK
LONG ISLAND SOUND
LONG ISLAND SOUND
LONG ISLAND SOUND
T-34
T-22
T-111
0 250 500ft
0 50 100 150m

Figure 1. High angle oblique aerial photograph of Davids Island, ca. 1958, detail. View north. Labels have been added to this version of the image to indicate buildings and structures included in the Nike Battery NY-15 IFC Area. The battery's three radar sets are visible in this image and are labeled as follows: MTR—missile tracking radar; ACK—target acquisition radar; and TTR—target tracking radar. Building 124 is near the center of the image. Original from Record Group 291, National Archives, New York, NY; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.

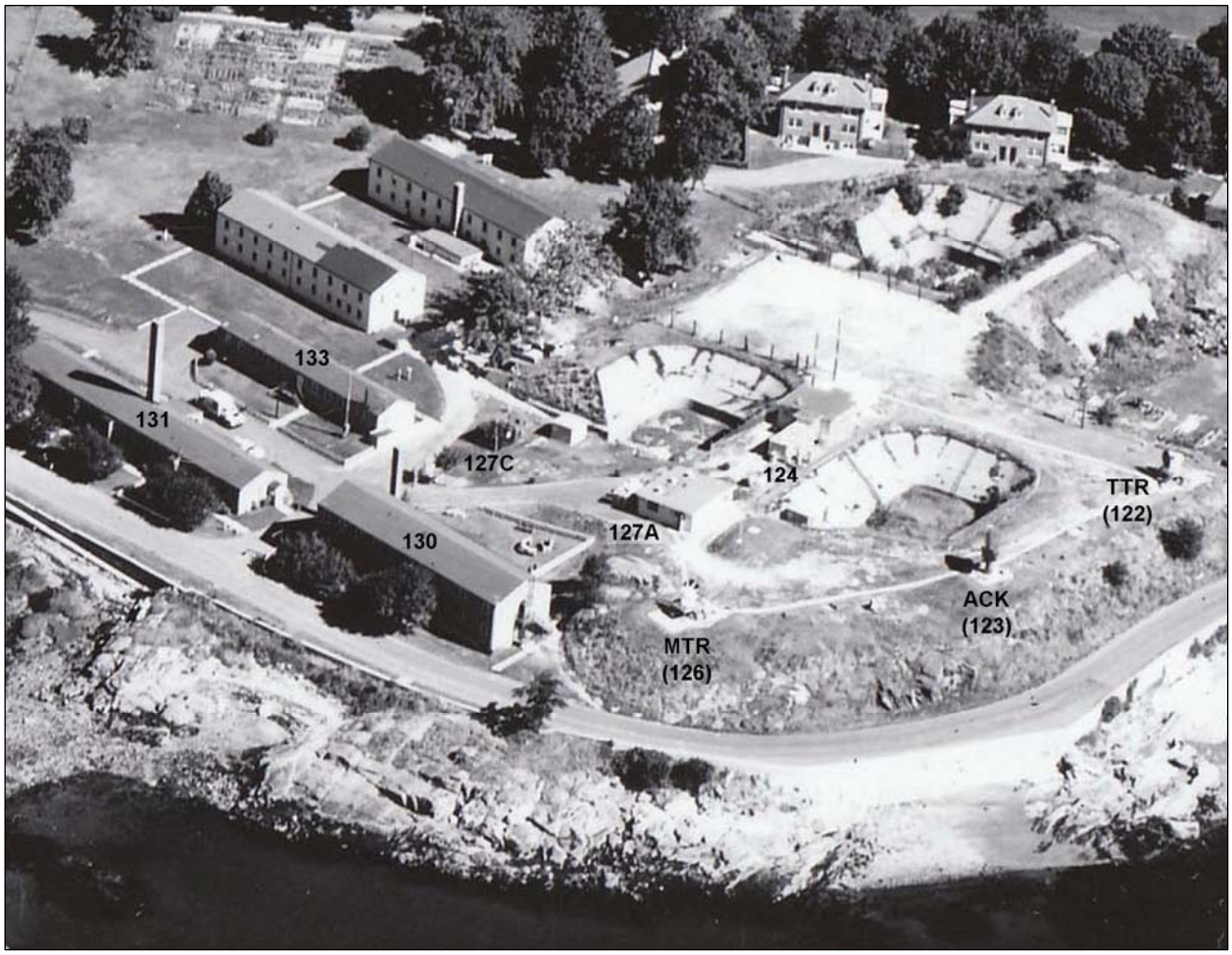


Figure 2. Photocopied snapshot of Building 124 in ca. 1959 taken by former Spec. 4 Rich Lowery, who served as a radar technician at Fort Slocum's Nike missile battery from 1959 to 1961. This view looks north across the southwestern corner of Pit A of Battery Haskin, part of the old coastal artillery mortar fortification on which the Nike IFC Area was partially constructed. The two mobile trailers that attached to the northerly and southerly sides of Building 124 can be seen here. The trailers were removed after the missile battery was decommissioned. Tetra Tech Oral History Project files, Lowery Collection, Morris Plains, NJ.

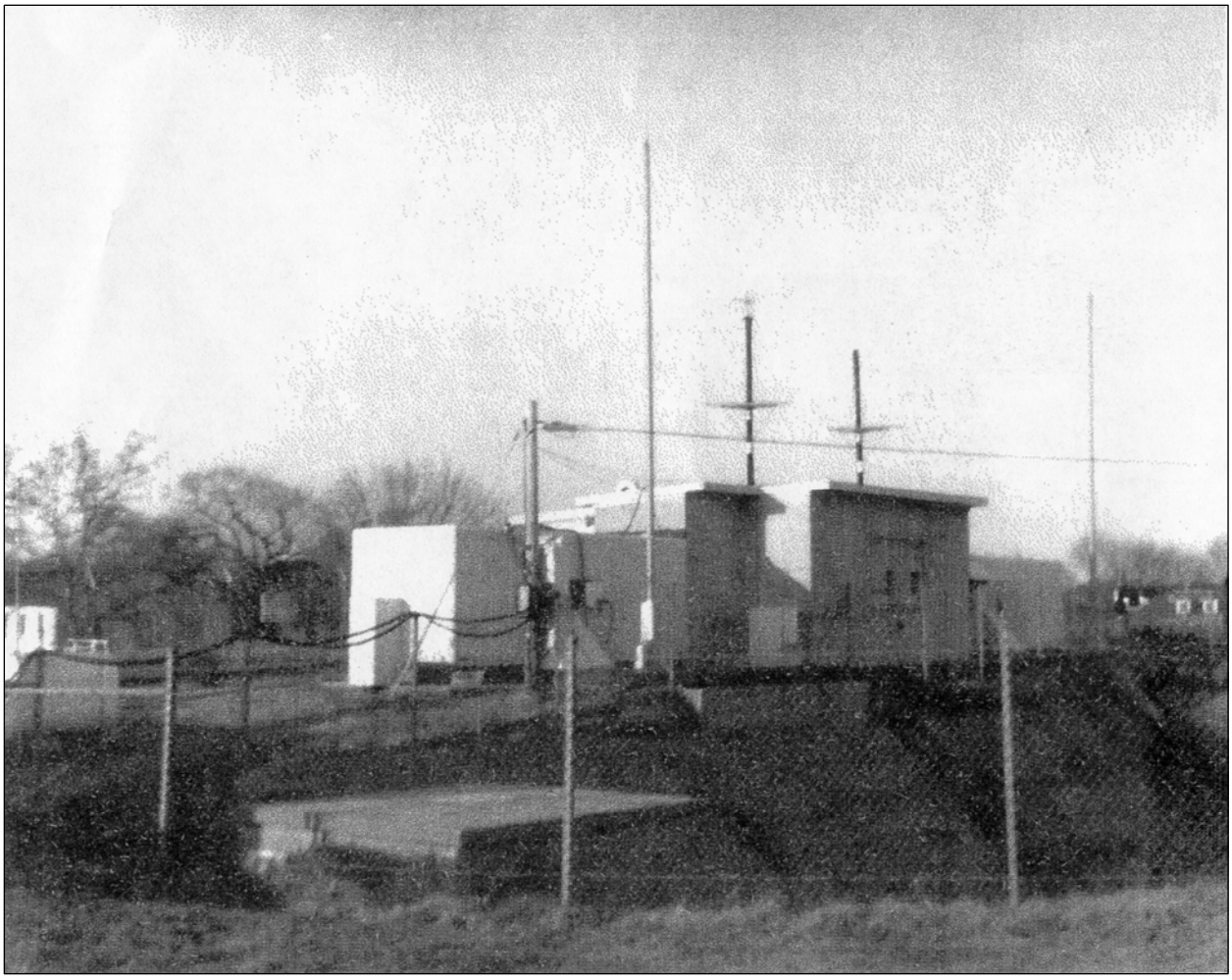


Figure 3. Photocopied snapshot of Building 124 in ca. 1959 taken by former Spec. 4 Rich Lowery, who served as a radar technician at Fort Slocum's Nike missile battery from 1959 to 1961. This view looks northeast and shows the southwesterly corner of the permanent masonry section of Building 124, including the southern docking bay or porch with its mobile trailer attached. The trailer was removed after the missile battery was decommissioned. Tetra Tech Oral History Project files, Lowery Collection, Morris Plains, NJ.

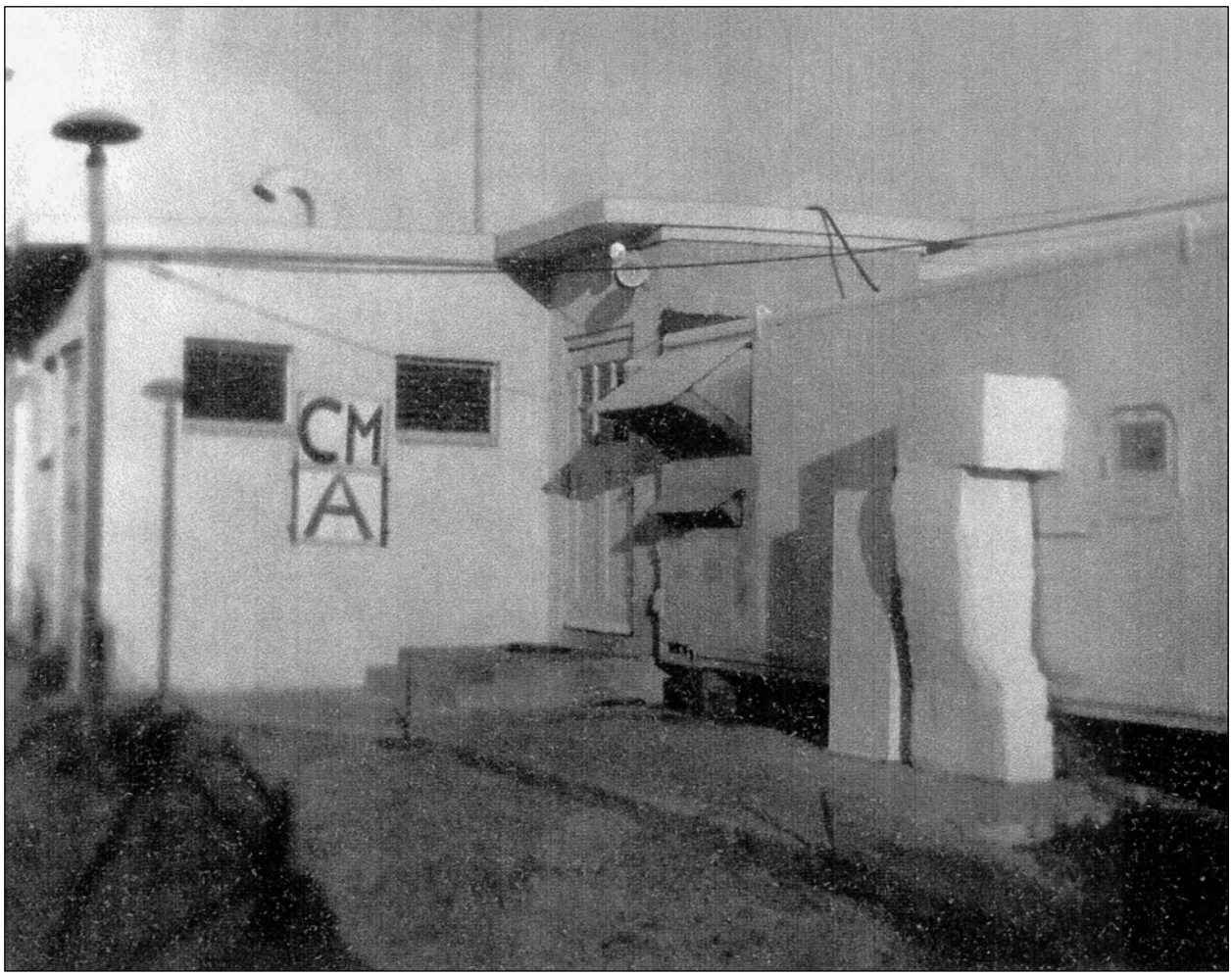
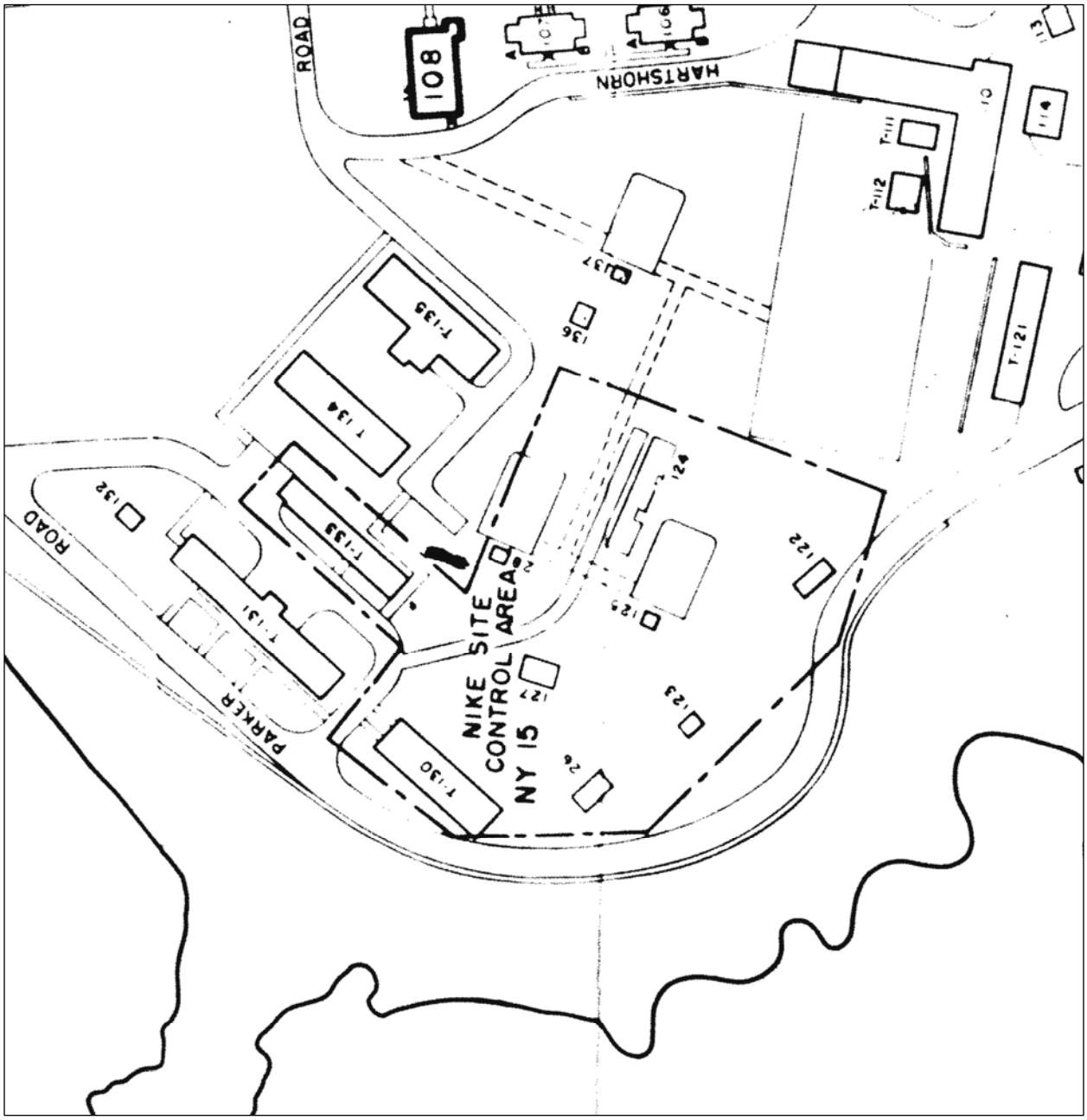


Figure 4. "Map of Fort Slocum (Davids Island), New Rochelle, N.Y.," revised through December 1961, detail showing the Nike battery IFC Area (labeled "Nike Site Control Area NY 15") and adjoining areas at the southern end of Davids Island. North is to the top of the page. Building 124 appears near the center of this image. Record Group 92, National Archives, College Park, MD.



HISTORICAL DOCUMENTATION

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NIKE SIGHTING STATION (BUILDING 124)
Davids Island—Fort Slocum
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New York

Photographers: Christopher L. Borstel, Tetra Tech EC, Inc., Morris Plains, NJ, February 2008 (Photos 1 and 4).
Caleb Christopher, Tetra Tech EC, Inc., Morris Plains, NJ, November 2006 (Photos 2 and 3).

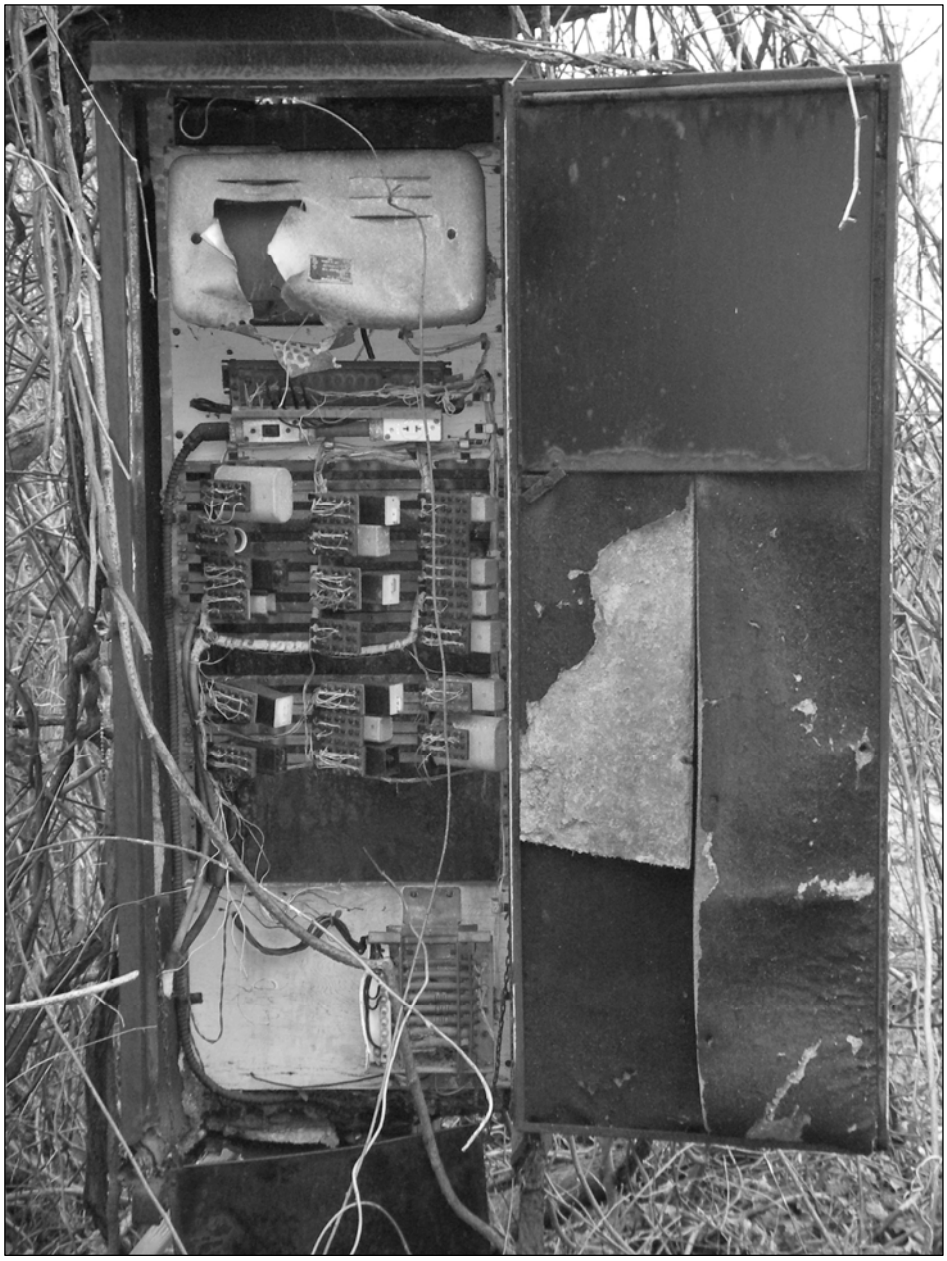
1. Southwestern façade, facing northeast.
2. Northwestern façade, facing northeast.
3. Western portion of northeastern façade, including docking bay or porch, facing southwest.
4. Electrical components in a pole-mounted steel equipment cabinet located about 30 feet southwest of Building 124.

Photo 1. Southwestern façade, facing northeast.

Photo 2. Northwestern façade, facing northeast.

Photo 3. Western portion of northeastern façade, including docking bay or porch, facing southwest.

Photo 4. Electrical components in a pole-mounted steel equipment cabinet located about 30 feet southwest of Building 124.



DAVIDS ISLAND – FORT SLOCUM HISTORICAL DOCUMENTATION

MORTAR BATTERY (BUILDINGS 125, 126, AND 127)
BATTERIES HASKIN AND OVERTON

Location:	Davids Island–Fort Slocum 0.6 mi southeast of New Rochelle, New York mainland USGS Mount Vernon, NY Quadrangle UTM Coordinate (NAD 1983): 18.603671.4526282
Present Owner(s):	City of New Rochelle, NY
Date of Construction:	1891-1897
Architect/Engineer:	U.S. Army Corps of Engineers
Present Use:	Abandoned (not in use). Extant in 2010
Significance:	The Mortar Battery, also known as Batteries Haskin and Overton (Buildings 125-127), is an element of the Defense and Support Area. It was one of the principal components of the coastal artillery fortifications that were active at Fort Slocum from 1897 to 1906. In the 1950s, a portion of the battery earthwork was the site of a Nike antiaircraft missile battery fire control station. The Mortar Battery was an essential element of the post's defensive function in the late nineteenth and twentieth centuries. The structure is a contributing element to the Fort Slocum Historic and Archeological District.
Project Information:	The U.S. Army Corps of Engineers, New York District (Corps), has been authorized under the Department of Defense Appropriations Act, 2004, to perform building demolition, debris removal, and remediation of asbestos materials (Project) at the Fort Slocum on Davids Island in the City of New Rochelle, New York. The purpose of the Project is to remove buildings and infrastructure from the abandoned fort installation that create safety hazards as part of a long-range plan to restore Davids Island for future use. In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800), the Corps has consulted with the New York State Historic Preservation Officer (NYSHPO) regarding the effects of the Project on historic properties. The consultation resulted in the development of a Memorandum of Agreement (MOA) among the Corps, NYSHPO, County of Westchester, and City of New Rochelle as consulting parties. This documentation report was prepared in accordance with Stipulation II.C.1 of the MOA.
Prepared by:	Christopher L. Borstel, Ph.D.
Title:	Cultural Resources Specialist
Affiliation:	Tetra Tech EC, Inc., Morris Plains, NJ
Date:	December 2007 (Revision 1, January 2010)

PART I. DESCRIPTION

The Mortar Battery (Battery Haskin-Overton, Buildings 125-127) is located in the southeastern quadrant of Davids Island. The island is in the western portion of Long Island Sound, 0.6 miles southeast of the New Rochelle, NY, mainland, and 19 miles northeast of Midtown Manhattan (Location Map and Site Map). Davids Island is a roughly pear-shaped, relatively flat landmass consisting of approximately 78 acres above mean high water. It is heavily wooded and contains the ruins of more than 100 buildings and structures associated with the now-abandoned U.S. Army post, Fort Slocum. The ruins include barracks and quarters; quartermaster, administrative, medical, and recreation buildings; and coastal and air defense facilities. A concrete and stone seawall encircles most of the shore, and a system of roads and paths runs throughout the island. The Mortar Battery dominates the terrain of the southeastern end of Davids Island and occupies the central portion of the Defense and Support Area. This section of Fort Slocum is a functionally-mixed area that, in addition to fortifications and defensive structures, also includes utility and support-services buildings, women's barracks, and other types of structures.

The Mortar Battery is a large concrete and earth fortification for heavy mortars that were intended for use against warships as part of America's late nineteenth- and early twentieth-century harbor defense strategy (Figures 1-14; Photos 1-15). It originally comprised four deep pits laid out in a rectangle. (One of the pits was later demolished.) Army engineers employed monolithic concrete structures for the fortification's pit floors, walls, revetments, and tunnel system and enclosed these elements in a large earthwork. Each mortar pit contained emplacements for four 12-inch breechloading mortars, giving Fort Slocum's Mortar Battery a total complement of 16 mortars. These artillery pieces and many other components were removed after the Mortar Battery was decommissioned. The design of the battery is sometimes called an "Abbot quad," after its originator, Col. Henry L. Abbot (1831-1927) of the U.S. Army Corps of Engineers. Historical sources also occasionally identify this fortification and others like it as a half-sunken (or half-sunk) battery. This term indicates both that the mortar platforms were at an elevation somewhat below that of the original ground surface and that soil from excavation of the fortification's interior areas was used in the construction of the surrounding earthwork.

In March 1902, the Army formally designated the entire fortification as Battery Haskin, in honor of Lt. Col. (Bvt. Brig. Gen.) Joseph Abel Haskin (1818-1874), 1st U.S. Artillery, a New Yorker who served with distinction in the Mexican and the Civil wars (War Department General Order 30-1902). In January or February 1906, the fortification was divided into two named sections, with the southern half retaining the name Battery Haskin, while the northern half became Battery Clough Overton (frequently shortened in official documents to "Overton"). This designation honored Capt. Clough Overton (1867-1903), 15th U.S. Cavalry, who was killed in action at Suclatan, Province of Misamis, Mindanao, Philippines (War Department General Order 20-1906, amended by G.O. 40-1906).[1] Throughout this documentation, the hyphenated form of the name, Battery Haskin-Overton, is used interchangeably with the structure's simple functional identifier, the Mortar Battery.

The pits comprising each named battery were differentiated by letter. The "A" pits were located to the east and the "B" pits lay to the west. Battery Overton Pit A was demolished in 1941-1942, but the other three pits are extant. In the current building identification system for former Fort Slocum, the three extant

[1] As originally announced on January 25, 1906 in General Order 20-1906, the name Clough Overton applied to a battery at Fort Schuyler. However, this assignment was apparently in error, for a month later, on February 24, 1906, the War Department issued an amendment and assigned the name to the battery at Fort Slocum (General Order 40-1906). By the time of the February 1906 amendment, all fortifications at Fort Slocum had entered caretaker status.

pits are also designated by number—Building 125 is Haskin Pit A; Building 126 is Haskin Pit B; and Building 127 is Overton Pit B.

As a functioning fortification, the Mortar Battery was comprised not just of the mortar pits, but also included the earthwork that enclosed them, the tunnels and chambers within, and ancillary buildings, such as a data booth for each pit and a powerhouse for the entire complex. Some of these components are independently numbered, including two of the data booths, Buildings 127-B and 128-A, and the powerhouse, Building 128, and these are documented separately elsewhere in Volume 5 of *Documentation of Contributing Elements, Fort Slocum Historic and Archeological District, Davids Island, City of New Rochelle, New York*. Geographic coordinates of the key above-ground elements of the Mortar Battery are as follows:

Building No.	Element Name	UTM Coordinates Zone 18N, meters (NAD 1983)
125	Battery Haskin Pit A (center*)	18.603663.4526244
126	Battery Haskin Pit B (center*)	18.603635.4526264
–	Battery Overton Pit A (demolished—estimated center*)	18.603695.4526295
127	Battery Overton Pit B (center*)	18.603668.4526315
Unnumbered	Data Booth, Haskin Pit A	18.603648.4526236
127B	Data Booth, Haskin Pit B	18.603626.4526254
128	Powerhouse	18.603650.4526303
–	Data Booth, Overton Pit A (demolished—est. location)	18.603688.4526291
128A	Data Booth, Overton Pit B	18.603661.4526311

*Geographic centroid of pit, including concrete revetments.

Later uses of the Mortar Battery and development of the surrounding area resulted in alterations to its topography, ground plan, and assemblage of associated buildings. Portions of the battery were demolished, fill from the earthwork was removed, and several new buildings were built upon it. The unnumbered small arms firing range and a storage building (Building T-111) are later additions that comprise substantial alterations to the northeastern quadrant, where Battery Overton Pit A was originally located. Several structures belonging to the 1950s-era Integrated Fire Control Area of a Nike missile antiaircraft battery occupy elevated areas in the southern part of the earthwork. Nike structures include Buildings 124 (Nike Sighting Station), 127-A (Nike Generator Building), and 127-C (Transformer Vault No. 9)—all of which are documented separately—along with three unnumbered concrete pads for radars. The vegetation covering the battery has also changed substantially. When it was operational, the earthwork was covered in turf and the mortar pit floors and lower walls were bare concrete. After the battery was formally removed from service in about 1920, the Army allowed a few trees and shrubs to grow up gradually upon it. Once Fort Slocum closed in 1965, Norway maples took over, and the battery became wooded. Although the concrete floors and walls of the mortar pits were not especially hospitable to plant growth, some trees gained toe-holds in the cracks in the concrete and in the accumulating leaf litter. In 2008, as part of its post-demolition landscape restoration work on Davids Island, Tetra Tech EC, Inc., at the direction of the U.S. Army Corps of Engineers, removed the trees growing on the floors and interior slopes of the three pits and scraped off leaf litter and the incipient soil that was developing from this organic material (Tetra Tech 2009a:8-2).

As originally constructed, the Mortar Battery covered approximately 2.9 acres, but demolition of Battery Haskin Pit A removed around six-tenths of an acre, reducing the footprint of the extant earthwork to roughly 2.3 acres. The Mortar Battery's principal axis is about 33 degrees east of true north, and along

this axis and its perpendicular, the earthwork measures a maximum of 420 by 310 feet. It originally had a reported maximum crest elevation of 55.3 feet above mean low water, or around 52 feet above local mean sea level, and stood as much as 30 or 40 feet higher than the adjacent natural terrain to the north and east. Its present elevation is lower, around 43 feet above mean sea level according to one source, and its highest point has shifted northward from the center of the earthwork to east of Battery Overton Pit B (Consolidated Edison Company of N.Y. 1973; U.S. Army Corps of Engineers 1920). The composition of the earthwork fill is not known in detail, but presumably includes locally-excavated till and soil, possibly supplemented by material imported to the island. While the northern, eastern, and western slopes of the battery are artificial, its southern end is largely a natural hill slope. Army engineers constructed the battery by building northward and upward from this hill, whose original elevation was around 39 feet above mean sea level. The hill is a gneissic bedrock knob covered by a veneer of glacial till and soil and except for its southern slope, was obscured or obliterated by construction of the battery. A brick water tower, built about 1885, stood at the crest of the hill when the battery was built and continued to occupy that site until 1929 when the present steel water tower (Building 45) on the north end of Davids Island replaced it.

The original four mortar pits are laid out on a rectangular plan, 115.5 by 230.7 feet on center (Figures 3-5). Individual pits are also rectangular. At the floor, each measures 40 by 60 feet. The southern corners of each pit are squared, while the northern corners are rounded. Entrance to the two pits on the western, or "B," side of the battery is via 10-foot-wide ramps that descend to the pit floor from the surrounding grade. The eastern, or "A," pits connect to the western pits by lateral tunnels beneath the earthwork. Steel ladders affixed to the sides of each pit provide a secondary means of entrance and egress, via the top of the earthwork.

The floors of the mortar pits are constructed of cast-in-place concrete, carefully smoothed on the surface and depicted in a circa-1920 cross-section sketch as approximately 6 feet thick (U.S. Army Corps of Engineers 1920). The northern two-thirds of each pit is largely taken up by four large, circular well-like features into which individual mortars were emplaced. The mortar emplacements are arranged in nearly square or square groups, 19 by 20 feet on-center in three of the four mortar pits, but 20 by 20 feet on-center in Overton Pit B. They are now largely filled with accumulated rainwater, leaves, and debris and are difficult to examine in detail. Design drawings depict a typical emplacement as nominally 17 feet-10 inches in diameter and 50 to 58 inches deep. The interior of the emplacement had either one or two broad steps, onto which the base ring of the mortar carriage was bolted (U.S. Army 1917:Plate I; Russell 1895). It also held the traversing roller system and the racer, the mechanisms that allowed the carriage with its mounted mortar to rotate, or traverse. Components of the recoil-and-counter-recoil system angled into the emplacement from the side frames and transom of the carriage, to which they and the mortar were attached. The framework and mechanisms inside the emplacement were normally protected by a decking of iron plates. The decking was the carriage's working platform. It consisted of an inner circle of plates attached to the racer, which moved as the mortar was traversed, and an outer circle of fixed plates attached to angle irons embedded in the emplacement wall. To the inner edge of the fixed plates was affixed a brass azimuth circle, a device used to aim the mortar. An opening with a ladder directly under the mortar provided ready access to the mechanisms beneath the decking of the working platform inside the emplacement (Figures 3-7).

While the northern two-thirds of each mortar pit is occupied by the tightly packed cluster of emplacements, the southern third has an open and comparatively simple floor plan. The southern section of each pit functioned as a staging and access zone, but because of differences in elevation among the pits

and the need to use ramps for access, these areas vary in plan from one pit to another. The southern section of Battery Overton Pit B is a level floor that extends unbroken from the mortar emplacements to the south wall of the pit. In the other three pits, however, this section is tiered, with ramps abutting the pit's southern wall and adjoining a higher or lower shelf of floor at the elevation of the emplacement area to the north. In Battery Haskin Pit B, the ramp at the southern end of the pit continues the downward slant of the access ramp from the exterior of the battery, dividing and descending both to the level of the emplacements and to the tunnel system. In both of the pits on the eastern, or "A" side of the battery, the ramps ascend from the level of the tunnels to the elevation of the pit floors.

Like the pit floors and ramps, the walls of the mortar pits are typically constructed of thick, cast concrete. The walls rise vertically to a height of around 6 feet and then flare outwards at an angle of approximately 37 degrees. They ascend at this angle to the lips of the pits, which were originally at a nearly universal elevation of 40.3 feet above mean low water (approximately 36.7 feet above mean sea level). The surrounding earthwork walls thus stand approximately 20 feet above the pit floors, except for Battery Overton Pit B, whose floor is nearly 4 feet lower in elevation than the other pits and whose surrounding walls are consequently higher. Like the vertical segments of the pit walls, the sloping sections are revetted in concrete all the way up the slopes to the lips of the pits. This characteristic is not clearly evident in the present appearance of the pits, because the accumulation of leaf litter and the growth of scattered trees in cracks in the masonry obscure the concrete just beneath the surface. Nonetheless, aerial photographs of the Mortar Battery taken from the 1920s to the 1960s clearly show the high concrete walls of the pits. Battery Haskin Pit A differs in some details from the foregoing description, because it is built into the underlying gneissic bedrock to a substantial depth. In this pit, the builders determined the bedrock was sufficiently stable that portions of the pit walls consist of exposed gneiss without concrete revetting.

Battery data booths on the slopes of each mortar pit near its southwestern corner overlook the pits (Buildings 127B, 128A, and an unnumbered booth associated with Battery Haskin, Pit A). The booths are low, flat-roofed buildings of concrete, which were cast in place. The buildings measure approximately 10 by 11 feet and are just shy of 8 feet in height. Three small slit windows look out from the corner of the booth nearest the pit, and a doorway with a sliding steel door is located in a wall away from the pit. An array of sliding signboards, visible from the pit floor, projects from one corner of the booth. An operator inside the booth marked azimuth and elevation targeting data provided by the battery commander from an observation post elsewhere on the island, then slid the signboards out of the booth so that they were visible to the mortar crews below (Smith 2007).

An extensive system of tunnels and chambers beneath the battery earthwork connect the four mortar pits together and provide for storage of ammunition and equipment. In all, this subterranean structure includes three tunnels and eight chambers. It has an overall floor area of 6,422 square feet, including 3,534 square feet devoted to the tunnels and 2,888 square feet for the chambers. Its floor plan is quasi-symmetrical, but differences in the lengths of some elements and the slightly off-center location of the chambers keep it from being strictly so. The proportions and scale of the tunnels and chambers are modest, well proportioned for personnel who were handling materiel without machinery or appliances like ladders or hoists. Vault heights are generally in the range of 8 to 10 feet

The tunnels and chambers are constructed of cast-in-place concrete with massive walls, probably built using cut-and-cover methods. Typical of all construction in the battery, the concrete used for the tunnel system has abundant angular aggregate, probably of local crushed stone. It is unknown whether steel

reinforcing bar was employed in this construction. A record drawing dating to 1920 depicts the exterior walls of the complex as approximately 8 feet thick (U.S. Army Corps of Engineers 1920). Barrel vaulting is employed throughout. The walls and ceilings are universally marked with impressions from the wooden forms used during construction. These impressions are slightly obscured by a skim coat of light-colored mortar that has been applied throughout.

The main tunnel of the complex is completely internal and runs north-south for a distance of approximately 251 feet. It is positioned parallel to the mortar pits, but closer to the western ("B"-side) pits than to those on the east. Near each end, the main tunnel is intersected by lateral passages that connect to the mortar pits. The main tunnel extends 16 feet beyond the intersecting laterals at both ends, forming bays that were apparently used for storage. The lateral tunnels are somewhat narrower and shorter than the main tunnel. The open ends of the laterals are plain, lacking molded pilasters or recesses and without hinges or framing, showing that doors were not installed at the mortar pit openings. The eastern end of the northern lateral formerly opened into the demolished Pit A of Battery Overton, but this entrance is now blocked by a wall of random rubble stones set in thick mortar.

A group of chambers opens off each side of the main tunnel near its midpoint. The chambers extend 94 feet from the main tunnel on the eastern side of the battery and 70 feet from it on the western side. Each group consists of an L-shaped string of three connected rooms, including an entrance bay, anteroom, and magazine. In addition, there is a fourth, isolated chamber in each group, wider than the others and directly off the main tunnel. Except for the long, narrow rooms identified as magazines on a record drawing from 1920 (U.S. Army Corps of Engineers 1920—see Figure 4), the specific functions of the various chambers have not been determined. Walls 4 feet thick separate the rooms in a group. Narrow, rounded doorways connect the anteroom to those adjoining it and connect the isolated room to the adjacent corridor. These doorways are fitted with hinged doors of either wood (those leading to and from the anterooms) or iron (for the isolated chamber). The openings of the entrance bays off the main corridors are wide and arched and were not fitted with doors.

The floor of the tunnels and chambers is essentially level and is recorded as having an elevation of 15.3 feet above mean low water (or approximately 12 feet above sea level). During a visit in September 2007, the entire complex was found to be damp, with substantial condensation on the ceilings of the most isolated chambers. There is no apparent ventilation system other than the openings at the entrances to the tunnels. Small channels cast in the floors of tunnels and chambers at the walls are fitted with small drains. A drainage system is also indicated by manholes in the floor of the main tunnel, but this system is not understood in any detail and does not now appear to be functional.

The tunnels and chambers today are almost bare of fixtures and furnishings; however, a few intact fixtures, along with some items of hardware, runs of wiring, and other fragments remain. Among the remnants are several wooden and iron doors at the entrances to various chambers, which are either still on their hinges or removed and lying on the floor. Two piles of planking scattered on the floor on either side of the bay at the southern end of the main tunnel may represent collapsed wooden shelving. Another element still extant in the main tunnel is an iron or steel I-beam rail, which is affixed to the center of the vault ceiling. The rail probably carried a hoist and trolley, and ghosting indicates that it originally ran the full length of the tunnel; only 180 feet of the rail is still extant, extending from the southern end of the tunnel to near the northernmost chamber entry. In addition, on either side of this rail at the shoulders of the vault are large iron or steel angle brackets affixed to the wall. They are scattered along the full length of the main tunnel between regularly-spaced narrow rectangular ghosts that represent additional, non-

extant brackets. Neither the lateral tunnels nor any of the chambers have similar evidence of trolley beams or brackets; nonetheless, there are other patterns of ghosting on various tunnel and chamber walls that remain to be interpreted, as well as occasional pieces of hardware still in place, like ringbolts in ceilings. A few extant electric light fixtures and some additional circular holes probably for fixtures are present in the ceilings and walls are also present, along with occasional lengths of electrical cord.

The northeastern quadrant of the Mortar Battery is no longer extant, having been demolished in 1941-42 to construct a small arms firing range (see documentation for Building T-111 elsewhere in Volume 5). The range is variously identified in historical maps and documents as the Pistol Range, 1000-Inch Range, and Rifle Range. The range is a level platform with an elevation of 19 feet above mean sea level. The platform measures approximately 110 by 220 feet. The Mortar Battery earthwork rises abruptly from the floor of the platform on the west and south, and these faces are apparently the original concrete walls of the now-demolished Battery Overton Pit A. The present cover of woods, however, obscures the surface. On the east, a freestanding concrete block wall approximately 130 feet long and 6 feet high marks the edge of the range. The wall is constructed of gray concrete blocks, one block wide, except for 2-by-2-block piers every 16 feet. The northern end of the range is embraced by the interior (south and west) sides of the L-shaped Ordnance Storehouse/Laundry (Building 110), which is at a lower elevation than the platform. A retaining wall of varying height creates an irregular, informal alley between the side of Building 110 and the platform. A small cinderblock storage building, designated as Building T-111, stands near the northeastern corner of the platform. This and a neighboring building, T-112, which was demolished while Fort Slocum was still open, were apparently combination storehouse-shop-office structures associated with the firing range. No other elements related to the firing range have been identified, but the area is overgrown and visibility in the area is poor.

In addition to the above comments on the condition of the Mortar Battery and its constituent elements, three reports produced for the Corps of Engineers during the demolition and restoration work at former Fort Slocum also contain relevant information. Engineering staff conducted a qualitative structural assessment of the mortar pits and tunnel system, documenting the presence of cracks in walls and other deterioration (Tetra Tech 2008b:7-18). Additional details on the condition of the tunnel system appear as part of the demolition project's after-action report (Tetra Tech 2009a:Appendix D). Retaining walls and other small-scale landscape features on and adjacent to the Mortar Battery are described in a historic landscape inventory study (Tetra Tech 2009b:11-13, 28-30).

PART II. HISTORICAL NARRATIVE

Fort Slocum

Davids Island is named for Thaddeus Davids (1816-1894), a New Rochelle ink manufacturer, who owned the island between 1856 and 1867. Davids was next-to-last in a line of private owners and lessees associated with the island between circa 1700 and the 1860s. During this period, the island was used primarily as farmland, but beginning probably in the 1840s, it also became a destination for excursionists who traveled by steamboat from New York and Brooklyn to picnic by the sea. The U.S. Army leased the island in 1862 and purchased it outright in 1867. In 1967, the federal government sold Davids Island to the City of New Rochelle, which sold it in turn the following year to Consolidated Edison Company of New York, Inc. Consolidated Edison returned ownership of most of the island to the city in 1976.

Two U.S. Army posts successively occupied Davids Island between 1862 and 1965. The earlier post was established as De Camp General Hospital in May 1862. The hospital treated wounded Union soldiers and, from 1863 onwards, also cared for Confederate prisoners of war. After the Civil War, the Army remained on the island, apparently using the post somewhat discontinuously as a hospital, mustering-out camp, and subdepot for recruits. By the early 1870s, the hastily-built wood frame buildings of the Civil War had deteriorated badly, and in October 1874 the Army entirely withdrew from the island, beginning a hiatus in occupation of nearly four years.

The Army returned in July 1878, when Davids Island was designated as a principal depot of the General Recruiting Service, supplanting Governors Island off lower Manhattan in that role. Originally known simply as Davids Island, the Army formally named the post Fort Slocum in 1896 to honor Maj. Gen. Henry Warner Slocum (1827-1894), a prominent Union soldier and New York politician. Recruit intake and training was a primary function of the post well into the twentieth century. Fort Slocum also saw service as an overseas embarkation station; hosted Army specialty schools for bakers, transportation officers, chaplains, public affairs personnel, and military police; provided retraining for court-martialed soldiers; and was an administrative center for the Air Force. Coastal artillery batteries operated at the post around the beginning of the twentieth century. During the Cold War, Fort Slocum supported an air defense missile battery.

When the post closed in 1965, Fort Slocum's landscape integrated elements from different episodes of development into a campus-like whole. Several episodes of development were represented, particularly 1885-1910 and 1929-1940. A few wood frame buildings remained from the late 1870s and early 1880s, and at least nine such buildings represented the Second World War. However, of the more than 50 temporary wood frame buildings erected during the First World War, only a single, partial example survived. Most of the buildings at Fort Slocum followed standard Army plans, but Army personnel or outside professional architects also produced a few designs specifically for the post. The permanent buildings at Fort Slocum generally reflected conservative and eclectic interpretations of different currents in American architecture, producing an engaging mix of Colonial Revival, Neoclassical, Romanesque, and Italianate styles. The temporary buildings around the post were in contrast unadorned and starkly utilitarian, as they were designed principally for speed of construction.

The period after Fort Slocum closed in November 1965 saw severe deterioration of the former Army post. The City of New Rochelle repeatedly sought to redevelop Davids Island, at one time considering a Consolidated Edison proposal to build a nuclear power plant and later supporting proposals for luxury residences. None of these plans materialized. Neglect and vandalism took a heavy toll on the former post. By the first decade of the twenty-first century, the landscape was overgrown, and the more than 100 buildings and structures that once comprised Fort Slocum were in decay and ruin.

Detailed accounts of Fort Slocum's history can be found in the general historic overview to this documentation series (Tetra Tech 2008a) and in Olausen et al. (2005), among other sources.

Mortar Battery (Buildings 125, 126, and 127 and other unnumbered elements)

The Mortar Battery (also known as Battery Haskin-Overton and as Buildings 125, 126, and 127) is a product of the rapid advances in ordnance, armament, and military strategy that characterized the last three decades of the nineteenth century (Lewis 1979; McGovern and Smith 2006; Polaski and Williford 2003; Winslow 1920:199-223). The battery is an example of American coastal fortification of the early

modern, or Endicott-Taft, era. Fortifications of this period were constructed of poured, monolithic concrete, a material that at the end of the nineteenth century was just coming into widespread use for buildings and engineered structures. They also relied on thick earthworks to protect their armaments and personnel from enemy fire, not the masonry walls characteristic of earlier periods. These fortifications were, moreover, designed to blend into the landscape to make them more difficult to recognize at a distance. They were naturalistic, rather than artificial in form. At the same time, while they depended upon natural materials like earth as an essential material for design and construction, they also made extensive use of new and emerging technologies, such as telephonic communication, electricity to power machinery, and steel for artillery and gun carriage manufacture. The smoothbore muzzleloading artillery and solid shot of past eras—of which the Civil War-era Rodman gun was a culminating development—were abandoned in favor of breechloading rifled weapons that fired exploding projectiles (see documentation for Battery Practice and the Rodman Gun Monument in Volume 6 of the *Documentation of Contributing Elements, Fort Slocum Historic and Archeological District*). In the naval realm, warship design also adopted these advances, along with steam power and thick hull armor, to produce fleets of long-range, heavily-armed vessels that could menace a distant enemy's coasts and ports. The Mortar Battery and other fortifications built between the 1890s and the 1910s were part of a coordinated strategy to protect the United States coasts that emerged in response to these developments. This strategy assigned the Navy responsibility for defense at a distance, in foreign waters and at sea, while giving the Army the job of close-in protection of American ports.

The rapid pace of change in military technology also, however, quickly rendered Fort Slocum's fortifications and armaments obsolete. By the beginning of the twentieth century, the range of naval guns exceeded that of the artillery installed at the fort. Moreover, as the Army gained experience with the design employed for Slocum's mortar battery, imperfections became evident that later designs addressed better. Finally, the development of the overall system of coastal defenses along the shores of Long Island Sound soon made the fortifications at Fort Slocum, Fort Schuyler, and Fort Totten no longer essential to the protection of the East River entrance to New York Harbor, because forts were completed further east on the sound in Rhode Island, Connecticut, and New York. Indeed, as the twentieth century progressed, the entire strategy of coastal defense as embodied in Fort Slocum's Mortar Battery and the many other fortifications constructed around the beginning of the century became increasingly obsolete, as the development of military airpower and the high-angle capabilities of naval guns made them vulnerable to attack from above (Polaski and Williford 2003:87).

The decades immediately after the Civil War were a period of great austerity in the history of the U.S. Army. In the late 1860s and early 1870s, Congress repeatedly slashed the Army's size and funding and invested little in coastal defense. These developments had many causes. There was the long-standing American discomfort with standing armies and the need to return military expenditures to peacetime levels after the extraordinary expenses of the Civil War. Especially after Reconstruction ended in 1877 and federal troops were withdrawn from the South, there was also a widely-held perception that the principal role of the Army was in the defense and pacification of the Western territories. Furthermore, the 1860s and 1870s were a period of ferment in military research and design, and the future of naval weaponry was the subject of much debate and speculation but little clarity.

By the early 1880s, however, the American public, politicians, and military planners became increasingly alarmed about the potential vulnerability to naval attack of coastal cities, where much of the nation's commerce and industry were concentrated (e.g., Nimmo 1887). As foreign fleets modernized with steam power, large guns, and steel armor plating, neglect of American coastal defense became more and more

intolerable. Finally, in 1885 Congress authorized President Grover Cleveland to appoint an expert to examine the state of American coastal defenses. The Board of Fortifications was chaired by Secretary of War William C. Endicott, and is known to history as the Endicott Board. It issued its report in 1886 and concluded that America's coastal defenses were woefully inadequate. It called for an extensive program of fortification construction, increases in coast artillery forces, and weapons research and development. Congress adopted the Board's recommendations, but until the run-up to the Spanish-American War (1898), funded them at only a fraction of the proposed levels. Nonetheless, construction of fortifications soon began, and the Mortar Battery at Fort Slocum was among the first to be built. In the first decade of the twentieth century, the Department of War undertook a second review of America's coastal defenses to assess the progress that had been made since the 1880s. To this end, President Theodore Roosevelt convened a second fortifications board in 1905 and appointed William H. Taft as its chairman. The bulk of the Taft Board's recommendations reflected technological improvements, such as use of searchlights, electrification, and precision fire-control methods. Certain of these improvements were incorporated into the defensive works at Davids Island before the batteries on the island were put into inactive service toward the end of the decade (Lewis 1979; Louis Berger & Associates, Inc. 1986; McGovern and Smith 2006; Ranson 1967; Smith 2007; Winslow 1920:199-223).

Besides the Mortar Battery, Fort Slocum also had direct-fire batteries mounting two 5-inch and two 6-inch guns. These batteries, Kinney and Fraser,[2] were located adjacent to one another on the northeastern shore of the island, largely where a barracks, present-day Building 58 (built 1932), now stands. They were constructed in two stages between 1899 and 1904. Fraser, the 5-inch battery, became operational in 1901; Kinney, with 6-inch guns, reached this status in 1904. Control of all the defensive works on Davids Island was under a single commander, who occupied a sighting station. The commander's station was apparently first located near Officers' Row, just to the east of where the Quartermaster Storehouse/Commissary (Building 16) now stands. In 1904, a new 46-foot-tall fire-control tower (demolished circa 1937) was erected east of the Parade Ground near its southeastern corner. From these positions the commander communicated with the batteries via telephone or telautograph. Telegraph and telephone lines also allowed the battery commander to coordinate his activities with fortifications some 5 miles to the west at the northern mouth of the East River. These works were located at Fort Schuyler on Throgs Neck, on the northern side of the river, and at Fort Totten on Willets Point to the south of it. The armaments of these two forts consisted primarily of direct-fire guns ranging in size from 3 to 12 inches, but Battery King at Fort Totten mounted eight 12-inch mortars similar to those at Fort Slocum's Battery Haskin-Overton. Together, Slocum, Schuyler, and Totten protected the eastern approach to New York Harbor, where their mission was to prevent warships from bombarding New York or slipping into Upper New York Harbor from the north (Berhow 2006:207; Polaski and Williford 2003; Smith 2007; Tetra Tech 2009b:56, figure 6-43; U.S. Army Corps of Engineers 1914-1920, 1920).

In addition to the fire-control tower (battery commander's post), other key ancillary elements of the fortifications at Fort Slocum included the Ordnance Storehouse (Building 110), a 60-inch searchlight and its shelter, which were constructed on Battery Practice (no longer extant), and the Searchlight Powerhouse (Building 114), which are documented elsewhere in Volume 5 of the *Documentation of Contributing Elements, Fort Slocum Historic and Archeological District*.

[2] Battery Kinney was named in honor of Capt. Joseph Kinney, 25th U.S. Infantry, killed in action July 1814 at the Battle of Lundys Lane, Canada. Battery Fraser honor Capt. Upton S. Fraser, 3rd U.S. Artillery, killed in action with Seminole Indians at Withlacoochee River, Florida, December 1835 (War Department General Order 78-1903).

The design of Fort Slocum's Mortar Battery owes much to the ideas of Col. Henry L. Abbot (1831-1927) of the Army Corps of Engineers (Abbot 1929). A soldier whose career spanned the Mexican War, Civil War, and the long period of austerity in the late nineteenth century, Abbot commanded the artillery school at Willets Point, New York, in the 1870s. There he developed and experimented with certain critical ideas about the use of mortars against naval vessels. The trajectory of a mortar shell follows a high arc (unlike a gun, whose trajectory is relatively flat), bringing it in from above the target, a direction from which it is difficult to achieve adequate protection, as Abbot knew from his experiences during the Siege of Petersburg (1864-1865) and elsewhere. He recognized that while the trend of naval armament was to increase the thickness of plating on the hulls of warships, their decks remained comparatively light and vulnerable to attack from above. To increase their effectiveness, Abbot proposed clustering weapons into groups that would be fired simultaneously, producing a shotgun-like barrage. This concept led to the design of coastal mortar batteries laid out in a rectangle with clusters of four mortars at each corner. The surrounding earthwork protected the position from low-angle enemy fire and obscured its position on the landscape. The design is sometimes called an "Abbot quad," and it was the one employed for the mortar battery at Fort Slocum.

Fort Slocum's Mortar Battery was the third of its type to begin construction on the East Coast, the earlier ones being located at Battery McCook-Reynolds, Fort Hancock, Sandy Hook, New Jersey, and Battery Lincoln-Kellogg, Fort Banks, Winthrop, Massachusetts, both begun in 1890 (Louis Berger & Associates, Inc. 1986:13). As experience would later show, this early design was not entirely satisfactory. The mortar pits were crowded, as each weapon required a crew of nearly a dozen men to load, aim, and fire. Crowding slowed the speed of firing, particularly because the two mortars farthest from the pit entrance took the longest to load and clear. In addition, the muzzle blast in the confined space of the pit tended to damage the fortification. Through improvements to weapons and intensive training, the Army found that fewer weapons could be fired with the same effect as the original clusters of four. This finding eventually led to the reduction in the number of mortars mounted in a pit from four to as few as two, with consequent increases in speed and reductions of manpower. Such modifications were probably not, however, introduced at Battery Haskin-Overton, because of the early date at which it became inactive (Lewis 1979:figure 40; McGovern and Smith 2006:33; Smith 2007).

In addition to battery design, advances were made at the end of the nineteenth century in other areas of coastal defense as well. Among these was the development of the 12-inch breechloading mortar (BLM). The first approved design was the M1886 BLM, a cast iron weapon with a relatively low muzzle velocity and chamber pressure. The M1886 BLM was just 14 feet long with a 10-foot 9-inch barrel and a weight of 14.25 tons. It fired an 800-pound shell to a maximum range of 9,680 yards (5.5 miles) and was the type emplaced at Fort Slocum's Mortar Battery. With its 16 mortars, Fort Slocum was equipped with roughly one-fifth of the total production of the M1886 BLM, which amounted to 71 mortars in all. Six of Fort Slocum's mortars were the original model design, which employed seven steel rings to reinforce the cast iron barrel. The remaining ten mortars were of an improved design, which employed five reinforcing rings, but were identical in performance to the original design. Though adequate for the needs of this battery, even before it became operational, the M1886 BLM had been superseded by the M1890 BLM, a steel gun with a higher muzzle velocity and greater range. Around the same time as the mortars were being developed, the Army also designed and approved a fixed gun carriage for them, the M1891 mortar carriage (MC), which was later superseded by the improved M1896 MC. The carriage supported the mortar, provided mechanisms for elevating, traversing, and firing it, and had a system of springs and hydraulics for absorbing and countering the recoil of the weapon as it fired. All of Fort Slocum's mortars were mounted on M1891 carriages. Weighing about 41 tons each, the carriages were delivered to the

battery in pieces and assembled on site (McGovern and Smith 2006:30-33, 45; Smith 2007; U.S. Army 1917; U.S. Army Corps of Engineers 1920).

Construction of the Mortar Battery began in 1891 under the direction of the Corps of Engineers and continued until 1897, when the completed and armed fortification was turned over to the Coast Artillery Corps. The lead designer, chief engineer, and contractors are unidentified. The primary construction method employed was cut-and-cover, in which excavations were made to the necessary depth, concrete work was completed, then the earthwork was built on top of the concrete (Polaski and Williford 2003:87). Because of the extensive construction effort involved, the Corps of Engineers erected its own pier just off the Mortar Battery (the "Engineer Wharf") for receiving supplies. The pier was in existence by mid-1891 and had been removed prior to mid-1906 (Hodges 1906; Houston 1891-92). No design or construction details are known.

The Mortar Battery was active for about a decade, but in 1906 both it and the direct-fire batteries were placed on inactive status (War Department General Orders 22-1906 and 25-1907). The circumstances of this change are unknown. Quite possibly the Army concluded that the Mortar Battery's design was inefficient and its range too limited to justify continued expenditures. As McGovern and Smith (2006:30) observe, engineers built the first Endicott-Taft batteries "without practical tests, modifying earlier designs as little as possible. As they gained practical experience, they modified and improved their designs." With these improvements, "older batteries were modified at considerable expense and effort, although a few whose design or location did not justify their maintenance were abandoned." In addition, coast artillery fortifications had been completed further east on Long Island Sound, making Fort Slocum and its neighbors, Forts Schuyler and Totten, less critical to the defense of New York Harbor. Though inactive, the mortars and carriages remained in place until 1919, when they were scrapped and removed (U.S. Army Corps of Engineers 1914-1920, 1920; Smith 2007).

Although the heavy mortars occupied the battery pits for more than 20 years, they were only fired a few times and then only in practice. Period newspaper accounts record that in 1897, soon after the fortification was turned over to the artillery corps, the mortars were fired by members of the 2nd and 5th U.S. Artillery (New York Tribune 1897a, 1897b). Annual live firing of the mortars apparently continued in the two following years, but in 1899 Fort Slocum's commanding officer, Lt. Col. C.A. Woodruff, suspended live-fire because of the numerous complaints the post received from the surrounding community about broken windows (Cavanaugh 2009a; Jordan 1944).

Portions of the Mortar Battery earthwork were removed or modified after 1919. In 1926, a small nine-hole golf course was established at Fort Slocum. This course, in existence until ca. 1942, incorporated the fortification as a source of challenging obstacles. The deep mortar pits themselves were said to be wickedly difficult hazards. Aerial photographs taken between 1926 and 1940 show two or three greens and their adjoining sand traps on top of the fortification. A green or pair of greens was located near the center of the Mortar Battery and to the east of center between the A-pits of Batteries Haskin and Overton. A green with sand trap was also located at the northern end of the fortification between Pits A and B of Battery Overton. Another green lay immediately to the south of the earthwork on top of the hillock that anchored the Mortar Battery. Construction of the greens on the Mortar Battery earthwork required flattening the crests of the ramparts and creating level platforms and pits for sand traps where the original form of the battery had formerly been one of sharp crests and steep, uniformly sloping terrain (Cavanaugh 2007, 2009b; New York Times 1929).

Construction projects adjoining the Mortar Battery between ca. 1929 and 1940 also nibbled into the perimeter of the earthwork. At the northeastern corner, construction of the south wing of Building 110 required a notch to be cut into the earthwork slope in ca. 1929; the notch was greatly expanded in ca. 1940 when the south wing was extended. Construction of Hartshorn Road behind Buildings 106 and 107 in ca. 1940 required trimming back the northern edge of the earthwork and erection of a retaining wall of bonded random rubble (Wall W-7 of Tetra Tech 2009b). More extensive demolition soon followed, as Battery Overton Pit A was removed in 1941-1942 and replaced by the small-arms firing range.

As determined from study of aerial photographs taken in ca. 1958 and 1961, a portion of the earthwork around the Mortar Battery Powerhouse (Building 128) on the western side of the battery was removed in the 1950s, possibly for use as fill. During this period also, buildings and structures for the Nike IFC Area were also constructed around the southwest pit of the mortar battery (Battery Haskin Pit B). These included the Nike Sighting Station (Building 124), Generator Building (Building 127A), and three trailer pads for mobile radar units (currently unnumbered). Construction of these elements of the Integrated Fire Control Area required flattening and lowering the earthwork crest around the pit. This facility was in operation for approximately five years and was removed from service at the end of 1960.

Building numbers were not assigned to any element of the mortar battery complex until about 1958. At that time, the fire-control building associated with Battery Haskin Pit B (the present Building 127B) seems to have been numbered as Building 128. The other extant fire-control buildings were designated as Buildings 126 (Haskin-A) and 137 (Overton-B). The pits themselves do not appear to have been numbered. By the time of the first architectural inventory in the mid-1980s, the numbering sequence had been changed and numbers were applied to the pits rather than to the fire control buildings, which do not even appear on inventory maps. It is unclear whether these changes were intentional or resulted from misinterpretation and misreading of the system that existed when Fort Slocum closed.

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(Except as noted, all photographs are on file at National Archives, College Park, Maryland. Digital copies examined for this research come from the Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.)

ca. 1922: Low angle oblique aerial photograph of Davids Island. View northeast. Winter.

1924: Vertical aerial photograph of Davids Island. August 24.

1926: High angle oblique aerial photograph of Davids Island. View west. August 10.

1932: Low angle oblique aerial photograph of Davids Island. View north. January 11.

1936: High angle oblique aerial photograph of Davids Island. View south. January 17.

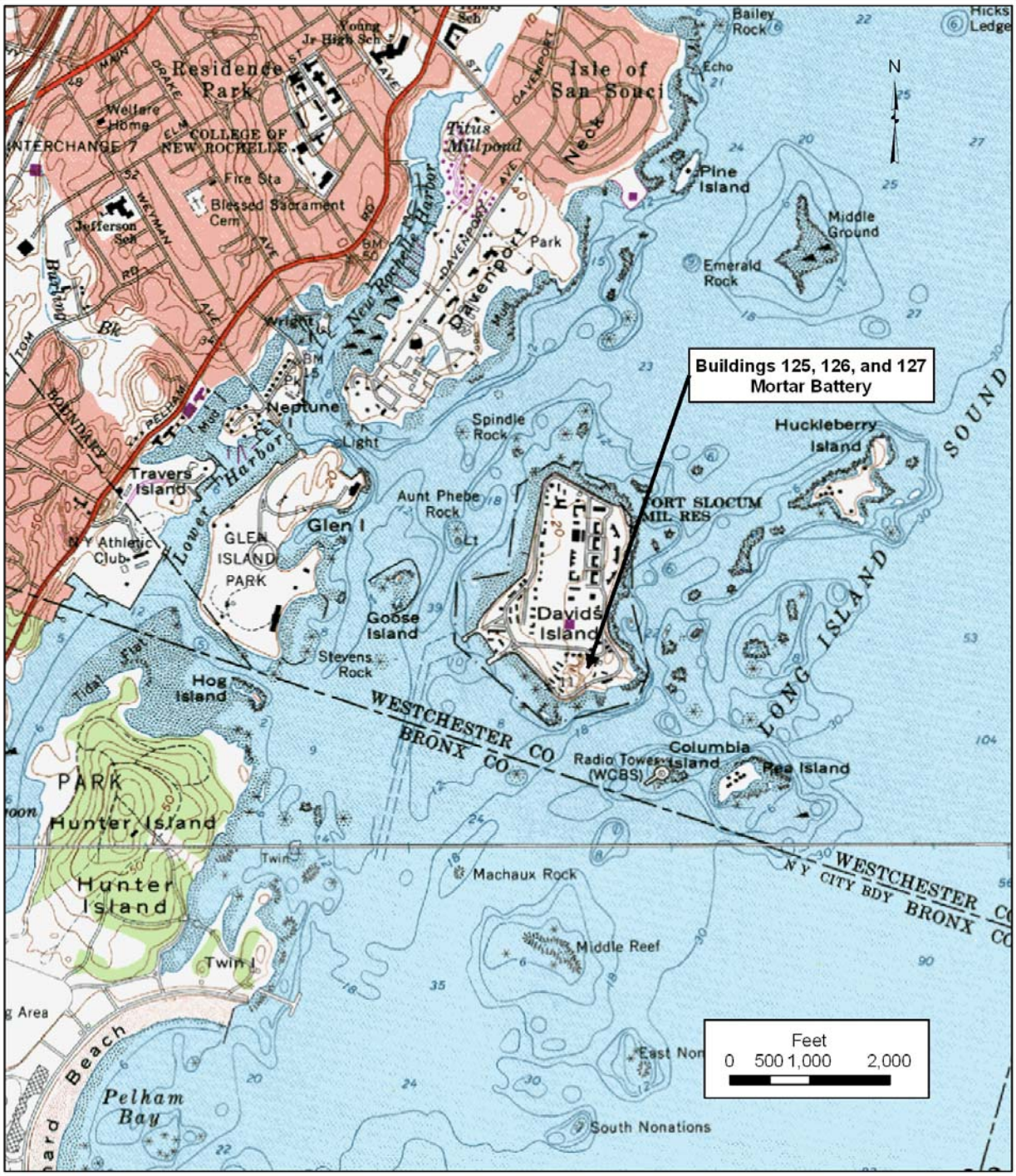
ca. 1938: Real-photo postcard showing low-angle oblique aerial photograph of Davids Island. Summer. View north. Also published in *New York City's Harbor Defenses* (2003), p. 92, by Leo Polaski and Glen Williford, Arcadia Publishing, Charleston, South Carolina.

1940: Vertical aerial photograph of Davids Island. September 4.

ca. 1958: High angle oblique aerial photograph of Davids Island. View north. Summer. Included in a 1966 report prepared by Cross & Brown Co., New York, for the Federal Property Resources Service, on file at the New York City branch of the National Archives, Record Group 291.

1961: High angle oblique aerial photograph of Davids Island. View north. November 15. Attributed to Capt. Donald P. Blake. In the Fort Slocum Alumni and Friends Collection.

LOCATION MAP (USGS Mount Vernon, NY)
Scale: 1:24,000
1966 (Photorevised 1979)



SITE MAP

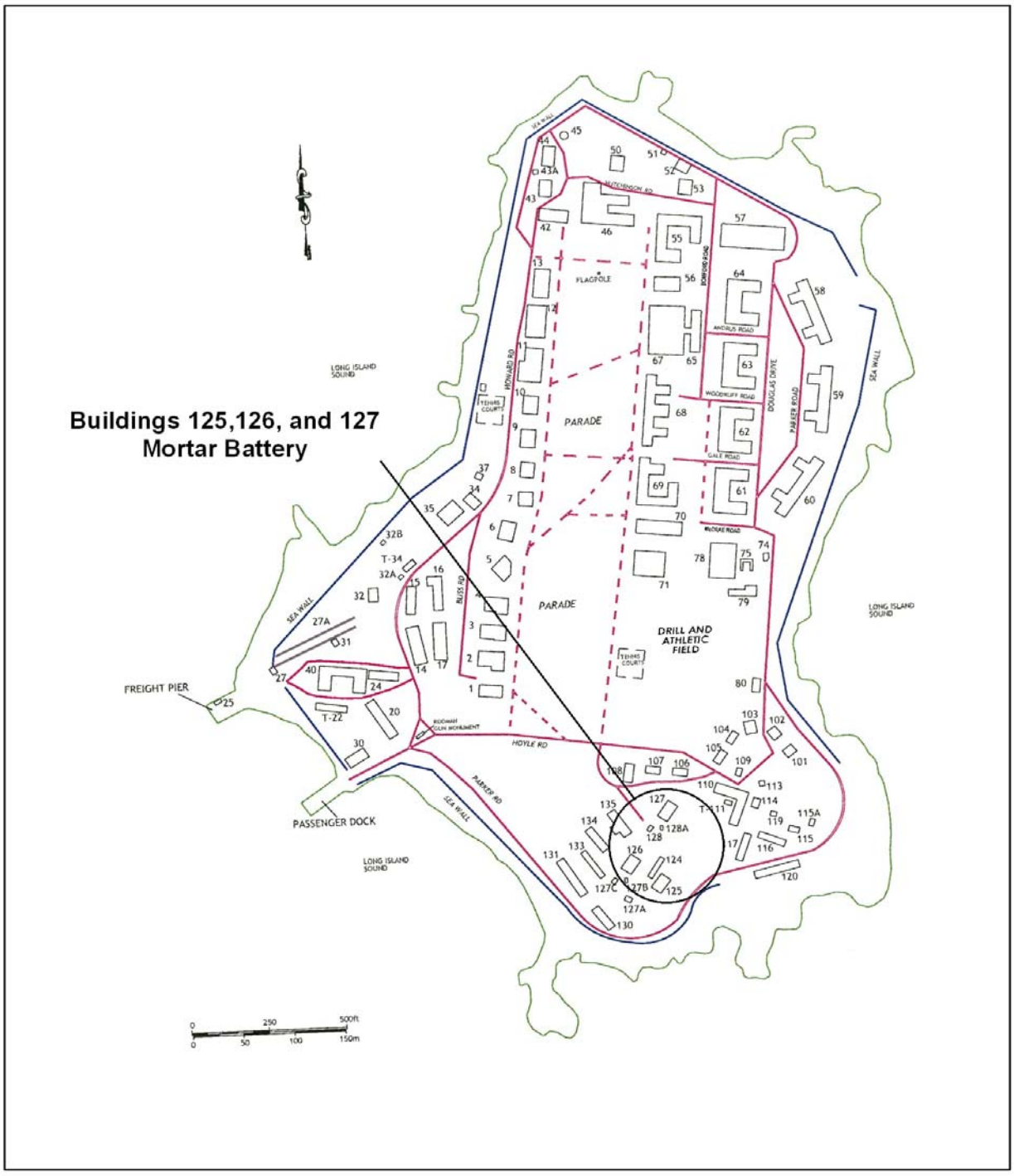

Buildings 125,126, and 127
Mortar Battery
PARADE
PARADE
DRILL AND ATHLETIC FIELD
FLAGPOLE
TENNIS COURTS
TENNIS COURTS
HOWARD RD
BUSS RD
HOYLE RD
PARKER RD
SEA WALL
SEA WALL
SEA WALL
LONG ISLAND SOUND
LONG ISLAND SOUND
LONG ISLAND SOUND
FREIGHT PIER
PASSENGER DOCK
0 250 500ft
0 50 100 150m

Figure 1. "Fort Slocum, New York: Plan Showing Location of Batteries and Fire Control Station," October 1902. The Mortar Battery (then called Battery Haskin) is at south end of island. The Engineers' Wharf, used for construction of the battery, projects from the southern shoreline. Record Group 77, National Archives, College Park, MD.

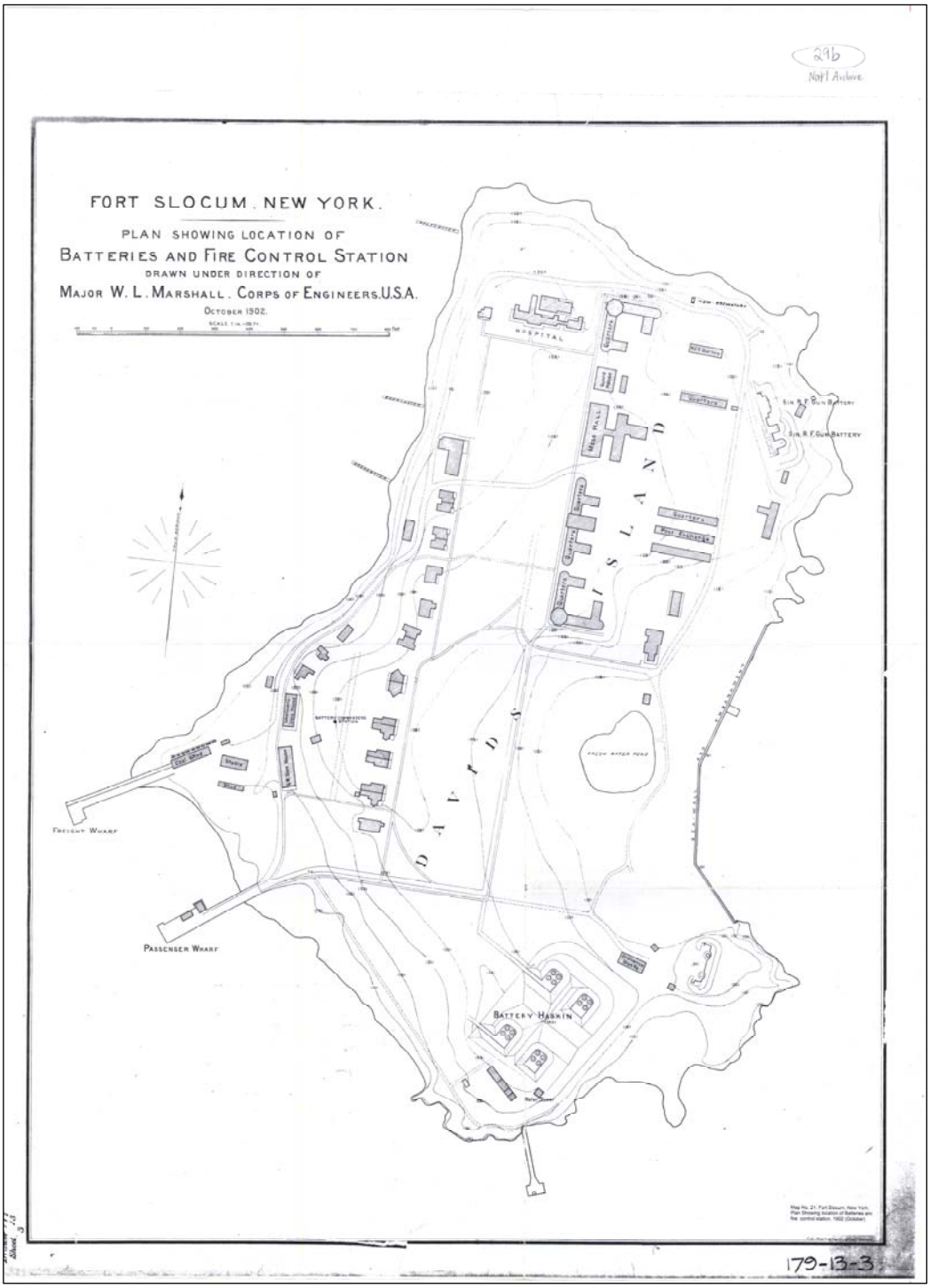


Figure 2. "Map of Fort Slocum, Davids Island, N.Y.," March 1909. Battery Haskin-Overton is located at the southern end of the island, but the individual mortar pits are not depicted, perhaps for security reasons. Record Group 77, National Archives, College Park, MD.

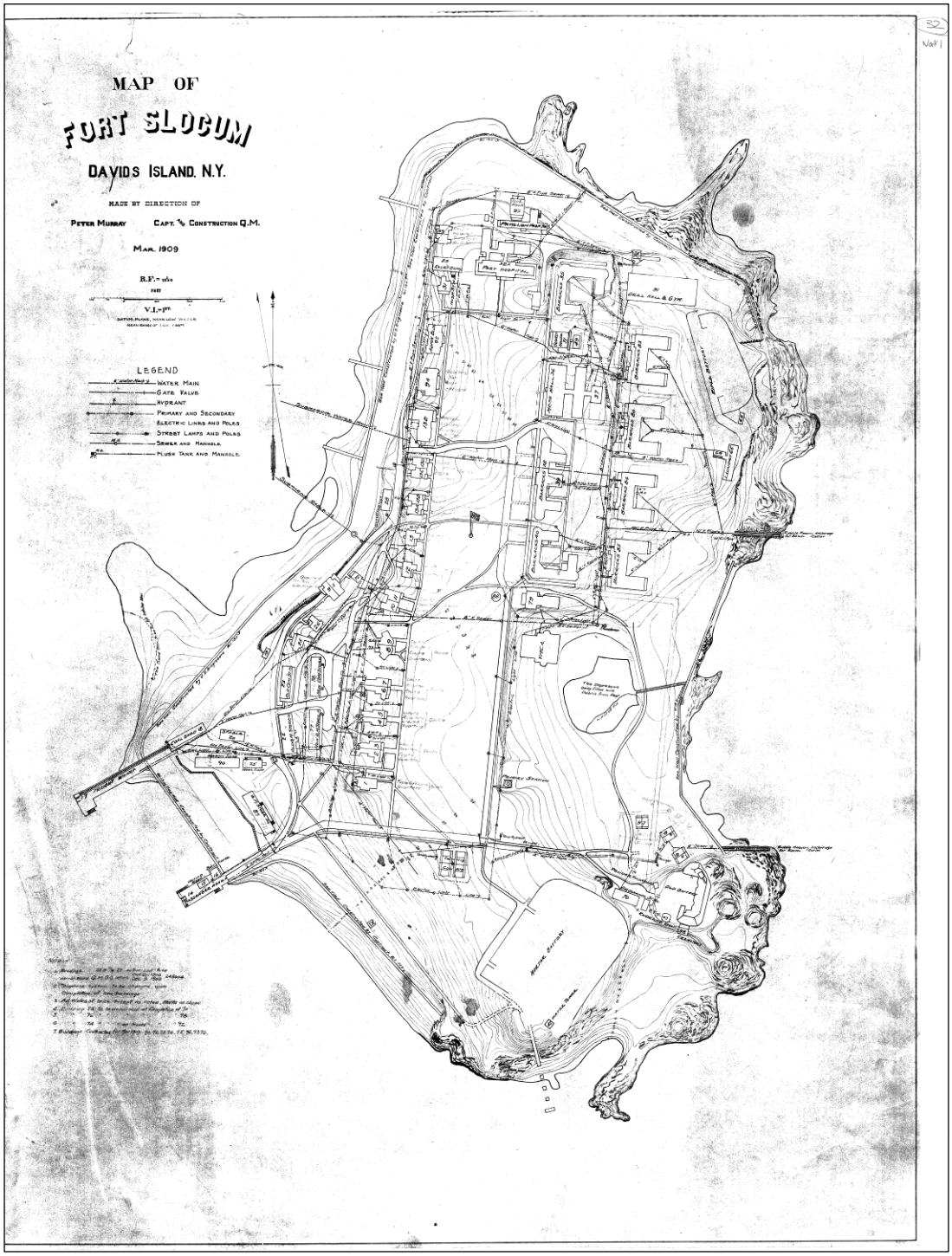
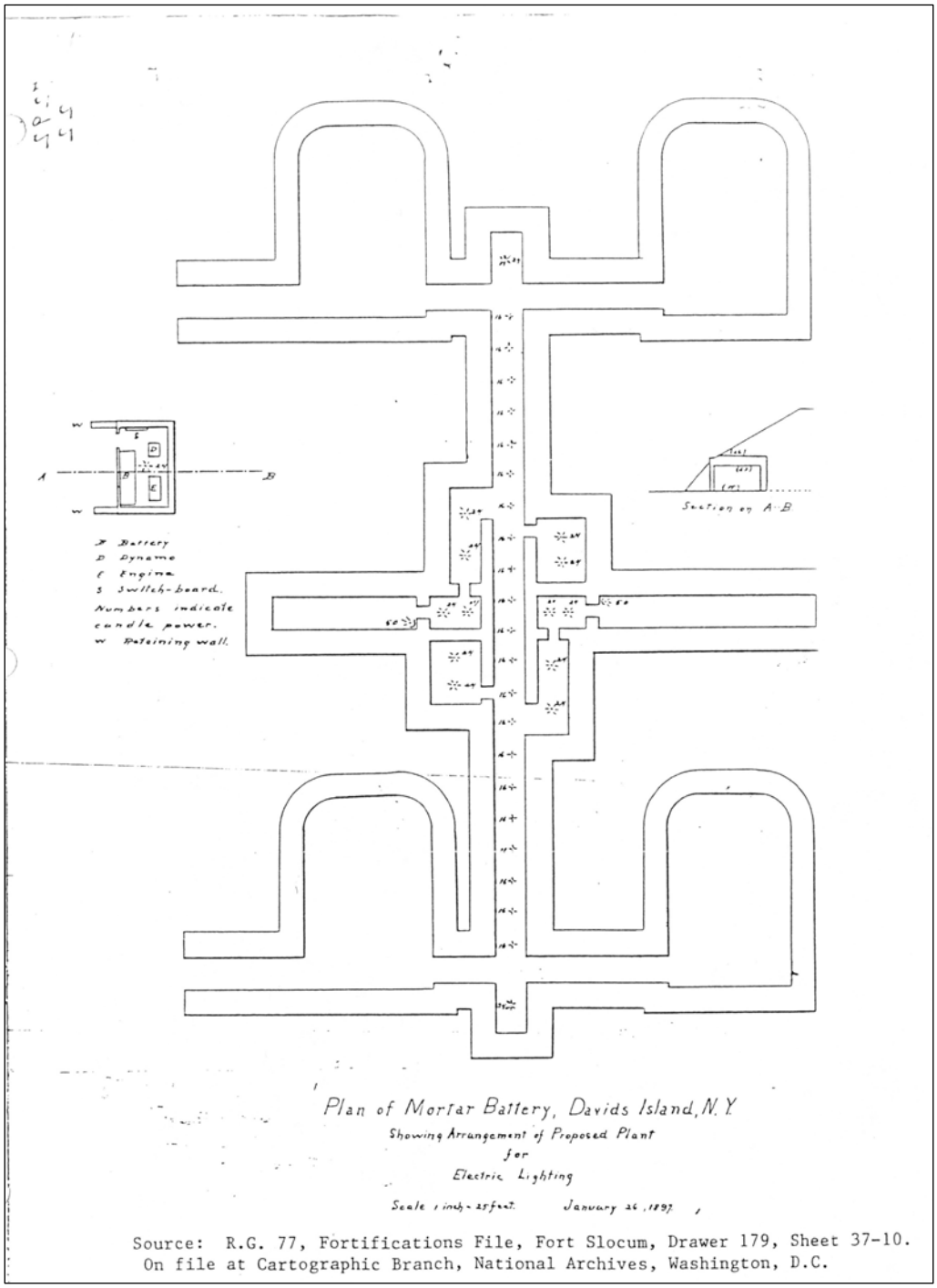


Figure 3. "Plan of Mortar Battery, Davids Island, N.Y., Showing Arrangement of Proposed Plant for Electric Lighting," January 1897. Original in Record Group 77, National Archives, College Park, MD; this copy reproduced from architectural inventory form for Mortar Battery (Buildings 125, 127, and 127) included in Louis Berger & Associates, Inc. (1986).



Source: R.G. 77, Fortifications File, Fort Slocum, Drawer 179, Sheet 37-10.
On file at Cartographic Branch, National Archives, Washington, D.C.

Figure 4. Record Drawing of Fort Slocum Mortar Battery (Battery Haskin-Overton), April 1920, after mortars and carriages were scrapped and battery was permanently removed from service. From U.S. Army Corps of Engineers (1920).

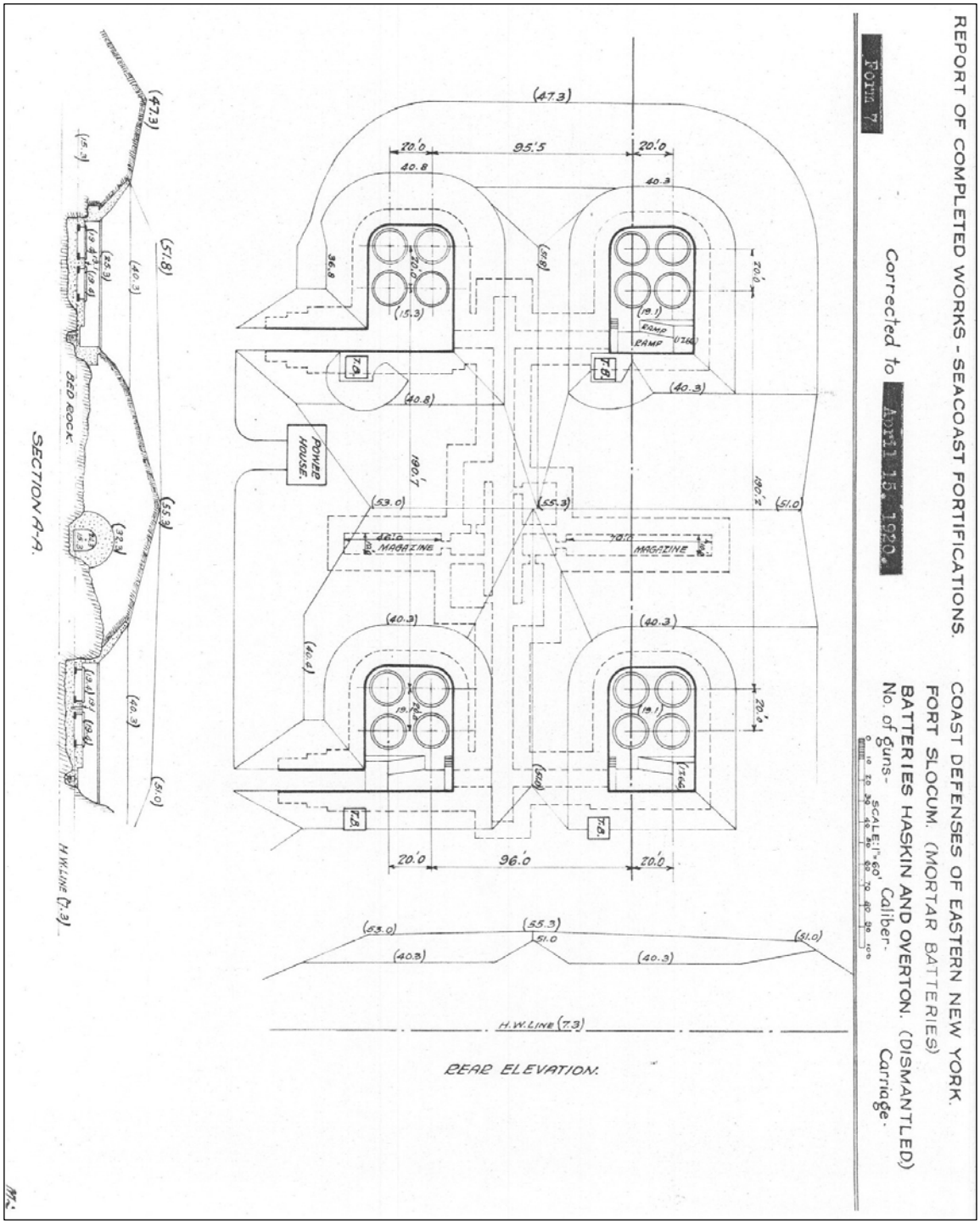


Figure 5. "Sections of a Half Sunk Mortar Battery at Davids Island, N.Y.," March 1896. Record Group 77, National Archives, College Park, MD.

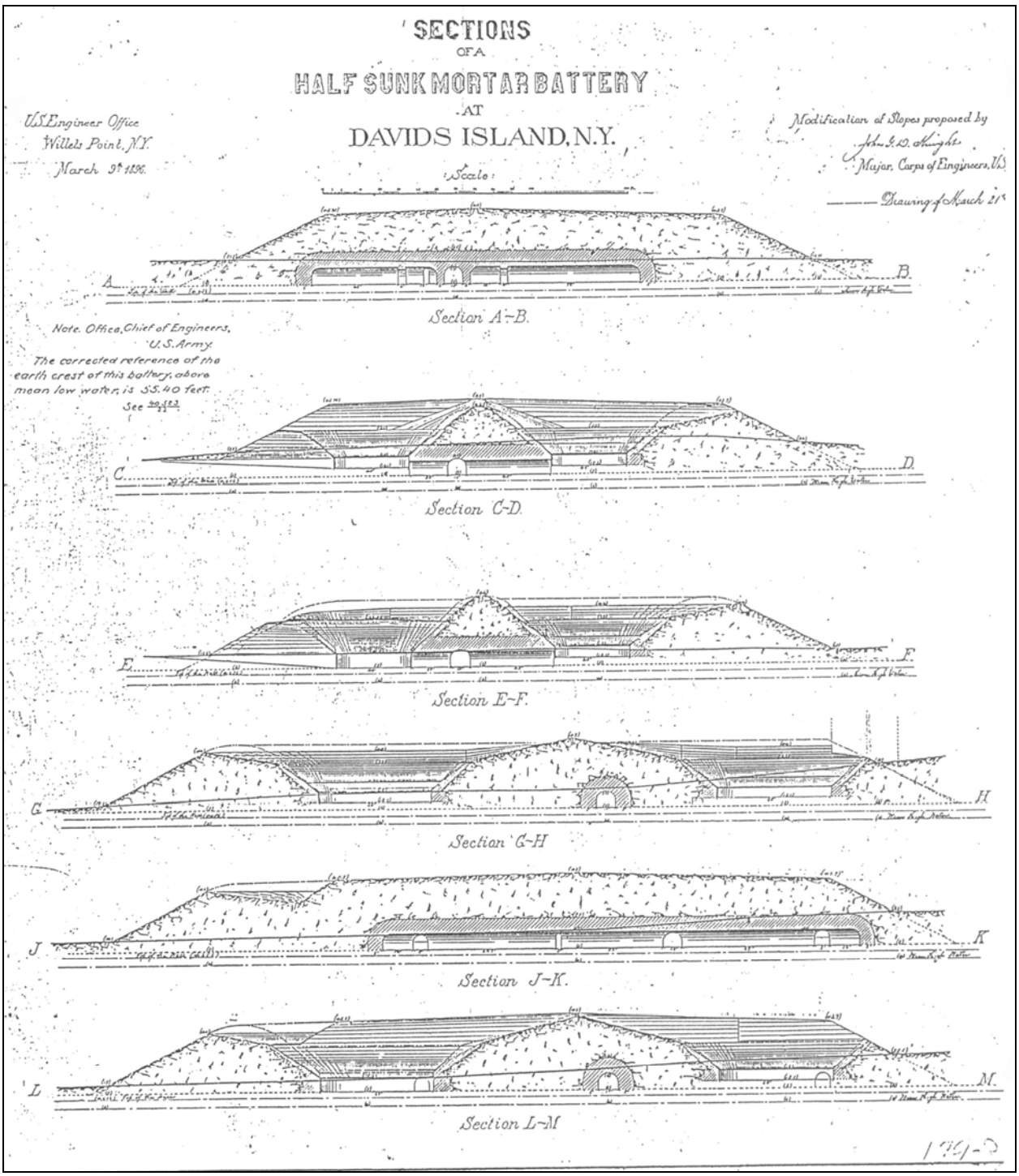
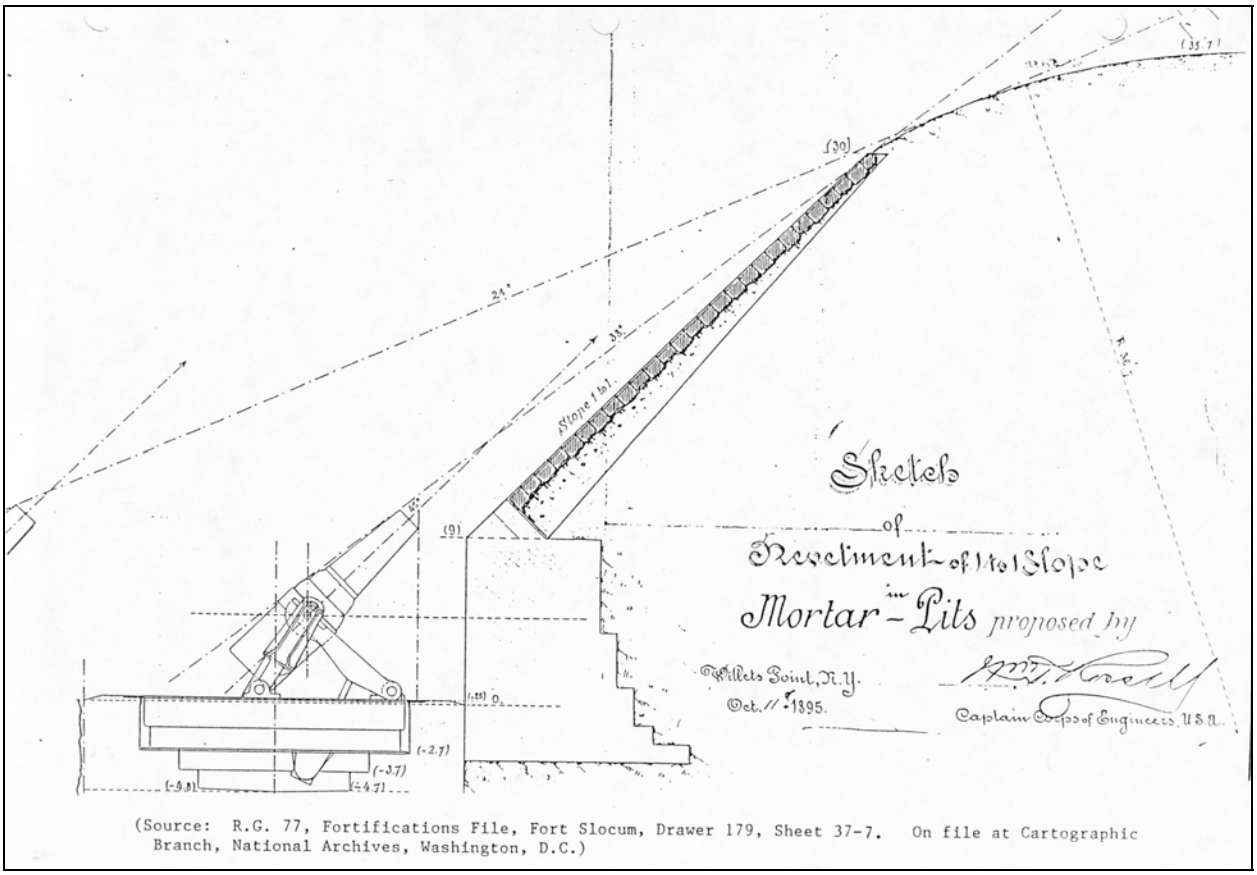


Figure 6. "Sketch of Revetment of 1 to 1 Slope in Mortar-Pits Proposed by Wm. T. Russell, Captain, Corps of Engineers," October 1895. Original in Record Group 77, National Archives, College Park, MD; this copy reproduced from architectural inventory form for Mortar Battery (Buildings 125, 127, and 127) included in Louis Berger & Associates, Inc. (1986).



(Source: R.G. 77, Fortifications File, Fort Slocum, Drawer 179, Sheet 37-7. On file at Cartographic Branch, National Archives, Washington, D.C.)

Figure 7. Detail drawing of Model 1891 mortar carriage mounted with a Model 1890 all-steel breech-loading mortar. The base ring of the mortar carriage is bolted to a step in the mortar pit. Attached to the base ring is the roller system (shown in the partial cut-out at right) and traverse ring, which allowed the weapon to rotate. Shown in an "x-ray" view slanting from right to left in the center of the drawing is the recoil-and-counter-recoil system, which absorbed the recoil of the discharging gun. The drawing also shows a side frame, which supported the mortar barrel, and the mortar itself. From U.S. Army (1917:Plate I).

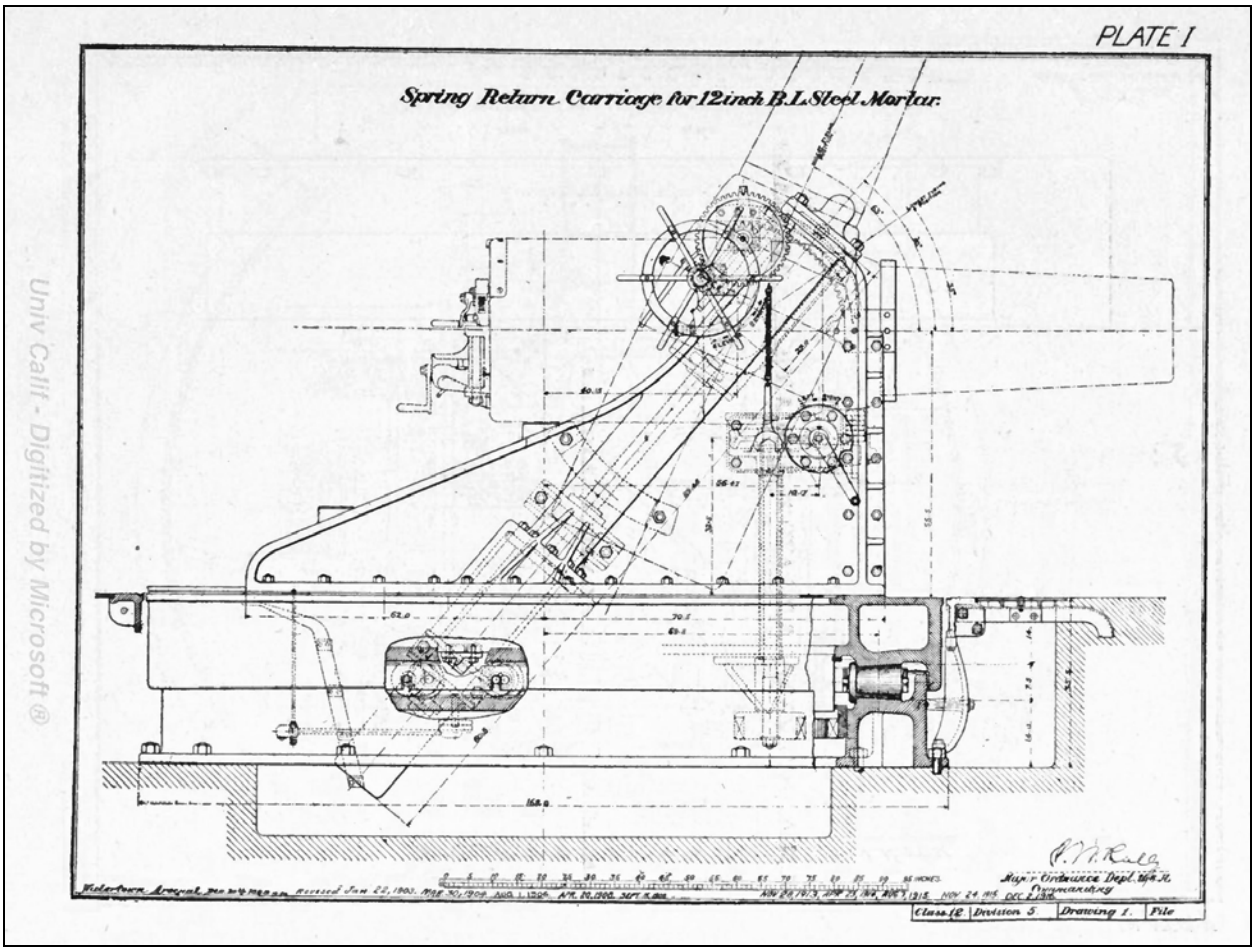


Figure 8. Battery King, Fort Totten, New York. Arrangement of this battery was nearly identical to Battery Haskin-Overton at Fort Slocum. Note the crowded conditions in the pit. From Polaski and Williford (2003:87).

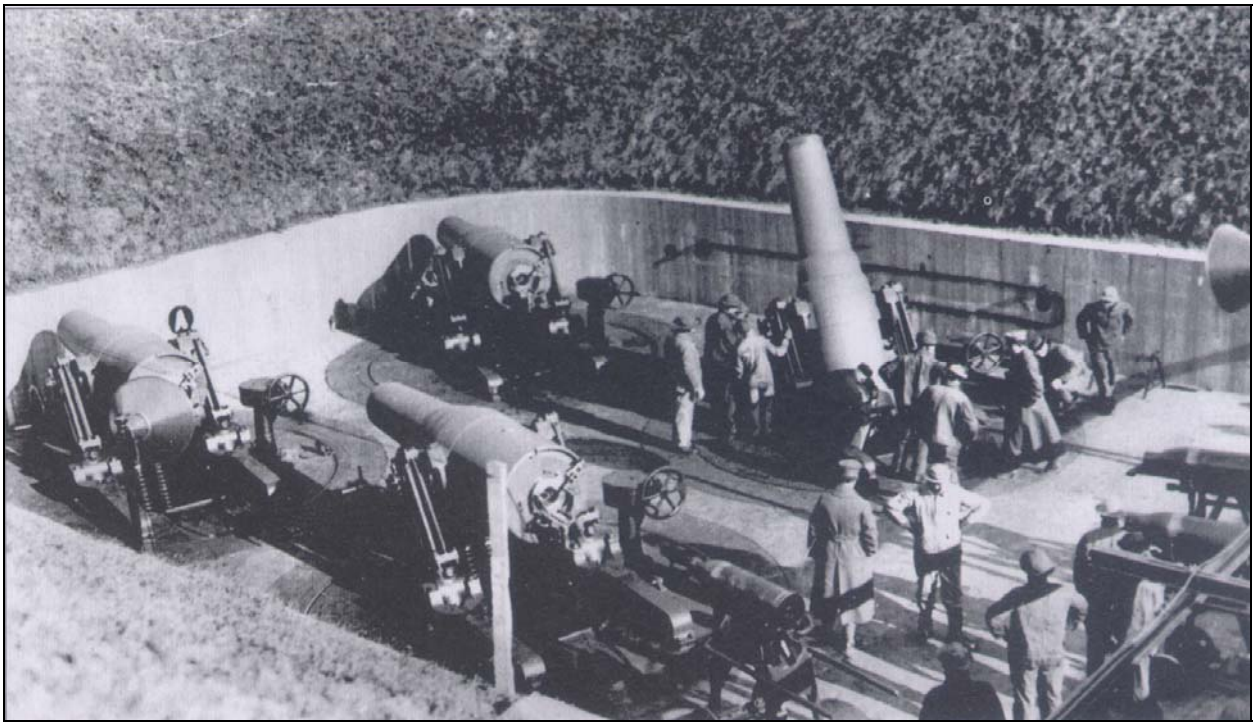


Figure 9. Typical cut-and-cover construction of a mortar battery in the 1890s, unknown location. From Polaski and Williford (2003: 87).

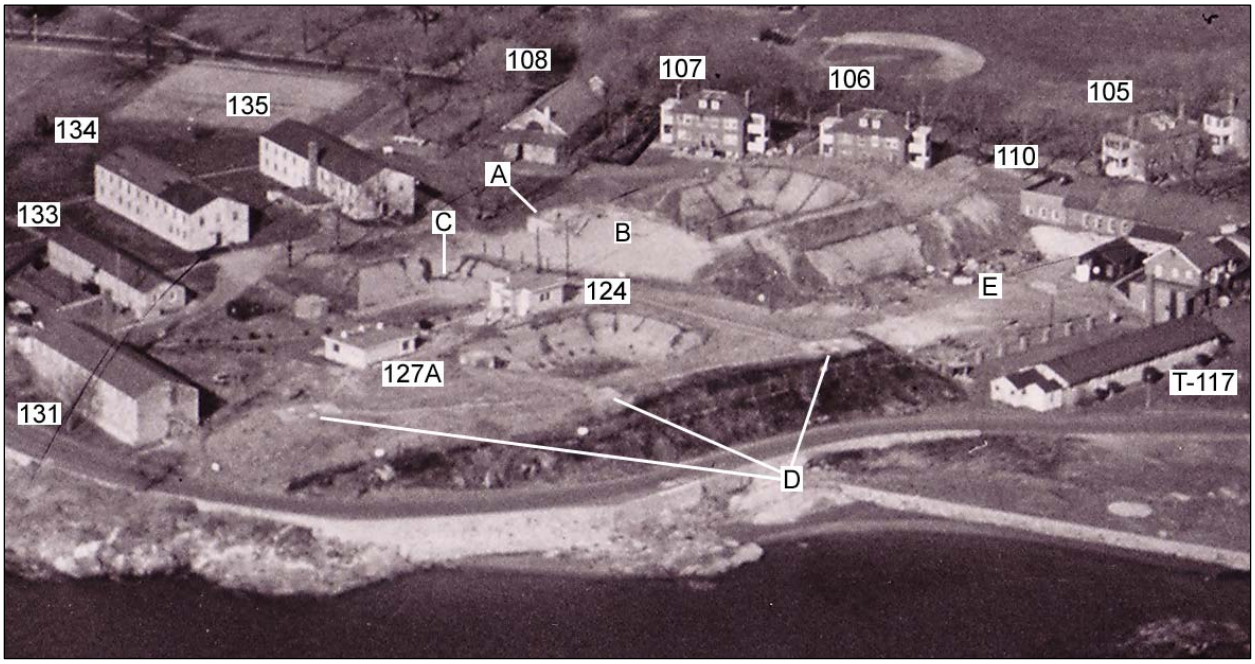
Figure 10. Oblique aerial view of Fort Slocum Mortar Battery, circa 1922, facing northeast, detail. Note the square brick water tower (built circa 1885; demolished 1929) at the southeastern corner of Battery Haskin Pit A. Original in National Archives, College Park, MD; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.

Figure 11. Oblique aerial view of Fort Slocum Mortar Battery, 1932, facing north. Greens and assorted sand traps for the post golf course occupy the top of the abandoned battery in this image. The greens are located in the center-right of the four pits, at the far end of the earthwork between two more distant pits, and below and slightly left of the pit at lower right. Original in National Archives, College Park, MD; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.

Figure 12. Oblique aerial view of Fort Slocum Mortar Battery, 1936, facing south, detail. In this image the entry ramps into Battery Overton B (left) and Battery Haskin B (right) are apparent along the northwestern (right) face of the battery earthwork. Between the two and embedded in the earthwork is the Battery Powerhouse (Building 128). Original in National Archives, College Park, MD; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.

Figure 13. Vertical aerial view photo showing Fort Slocum Mortar Battery, 1940, detail. The four rectangular mortar pits, each containing four closely-spaced, circular emplacements are plainly visible in this photograph. The small square to the lower left of each pit is a data booth. On the left side of the earthwork, the long, narrow entry ramps into the "B" pits can be seen. Also on that side of the battery, the entrance to the Mortar Battery Powerhouse (present-day Building 128) is visible below and to the left of Battery Overton Pit B (pit at upper left). The photograph further shows that by September 1940 the northeastern corner of Battery Overton Pit A (upper right corner of earthwork) had been demolished to make room for the recently constructed south wing of Building 110. The golf greens on the mortar battery earthwork noted in Figure 11 can also be seen in this picture, as can two other greens, to the left of the earthwork. Original in National Archives, College Park, MD; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.

Figure 14. Detail of oblique aerial view of Fort Slocum Mortar Battery, 1961, facing north, detail, with labels added for this documentation. Selected buildings have been labeled, including the Nike Sighting Station and Generator Building (Buildings 124 and 127-A, respectively), which were constructed in 1955 on the leveled top of the Mortar Battery earthwork between Pits A and B of Battery Haskin. Four rectangular buildings at left are several of the WAC/Nike Barracks (Buildings 131, 133, 134, and 135). Letters identify features visible in the airphoto: A—Mortar Battery Powerhouse (Building 128), which is partially exposed due to excavation of soil from earthwork; B—light colored area where soil of earthwork has been removed; C—apparent gap in pit wall due to demolition in northwestern wall of Battery Haskin Pit B; D—three pads for radar units (absent from photo) for Nike Integrated Fire Control Station; E—Pistol Range (former location of Battery Overton, Pit A). Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.



HISTORICAL DOCUMENTATION

INDEX TO PHOTOGRAPHS

MORTAR BATTERY (Buildings 125, 126, and 127)
Davids island-Fort Slocum
New Rochelle
Westchester County
New York

Photographers: Matt Kierstead, PAL Inc., Pawtucket, RI, November 2005 (Photos 1, 2, and 10).

Christopher L. Borstel, Tetra Tech EC, Inc., Morris Plains, NJ, October 2005 (Photo 8), June 2007 (Photo 9), September 2007 (Photos 11-12), December 2008 (Photos 3-7), and December 2009 (Photos 14-15).

Caleb Christopher, Tetra Tech EC, Inc., Morris Plains, NJ, November 2006 (Photo 13).

1. Battery Overton Pit B (Building 127), showing northeastern (left) and northwestern (right) gun emplacements, facing southwest. The Mortar Battery Data Booth (Building 128A) and Mortar Battery Powerhouse (Building 128) are at center rear. The walls and floor of the pit are covered by leaf litter and trees that began growing on the feature opportunistically after maintenance of it ceased.
2. Battery Overton Pit B (Building 127), showing northeastern (upper left), northwesterm (lower left), and southwestern (right) gun emplacements, facing southeast, covered by leaf litter and a growth of opportunistic trees.
3. Battery Overton Pit B after removal of opportunistic growth of trees from walls and floor of pit in fall 2008, facing southwest. Mortar Battery Data Booth (Building 128A) at center of photograph. Mortar Battery Powerhouse, which formerly stood behind the data booth, had been removed by the time of the photograph.
4. Western wall of Battery Overton Pit B (right) with Mortar Battery Data Booth (Building 128A) (left), facing southwest after removal of opportunistic growth of trees on pit walls and floor in fall 2008. Note steel ladder attached to pit wall (center right). Mortar Battery Powerhouse (Building 128), which formerly stood about 30 feet behind the data booth had been demolished by the time of this photograph.
5. Entrance ramp to Battery Haskin Pit B after removal of opportunistic growth of trees in fall 2008, facing southeast. The Mortar Battery Data Booth associated with this pit (Building 127B), which formerly stood to the right of the pit's near corner, had been demolished by the time of this photograph.
6. Southern end of Battery Haskin Pit B after removal of opportunistic growth of trees from pit walls and floor in fall 2008, facing east. Ramp to left climbs to level of mortar emplacements, while that to right slopes into the Haskin Lateral Tunnel.
7. Southwestern corner of Battery Haskin Pit A showing unnumbered Data Booth (top left), entrance to tunnel system (right), and edge of platform for mortar emplacements (foreground), facing southwest. Note exposed bedrock of southern wall of pit (left).

Photograph was taken after the opportunistic growth of trees was removed from pit floor and walls in fall 2008.

8. Northern end of Pistol Range constructed at the former location of Battery Overton Pit A, facing east-northeast from western wall of former mortar pit. Small structure in center is the Pistol Range Storehouse (Building T-111). Portions of the west (left) and south (right) wings of the Ordnance Storehouse/Laundry (Building 110) stand behind Building T-111 beyond the edge of the Pistol Range. The area is covered by trees that began growing on the feature opportunistically after maintenance of it ceased.

9. View across footprint of south wing of Ordnance Storehouse/Laundry (Building 110) after its demolition, facing southwest. Photograph looks toward Pistol Range, located in the woods, which occupies the former location of Battery Overton Pit A (demolished 1941-1942). Stone wall at center-left was constructed in ca. 1939 as a retaining wall when the south wing of Building 110 was built into the then-extant northeastern corner of the mortar pit earthwork.

10. Overton Lateral Tunnel, at junction of Main Tunnel, facing east-southeast toward blocked-off entrance to the now-demolished Battery Overton Pit A.

11. Storage Bay at north end of Main Tunnel, facing north-northeast.

12. Junction of Main Tunnel and West Entrance Bay, facing southwest.

13. Haskin Lateral Tunnel, facing southeast. Battery Haskin Pit A is located at far end of tunnel.

14. Gate to deter unauthorized visitors at entrance to Battery Haskin Pit B, facing southeast. Gate was installed in early 2009.

15. Gate to deter unauthorized visitors at entrance to tunnel in Battery Overton Pit B, facing southeast. Gate was installed in early 2009.

Photo 1. Battery Overton Pit B (Building 127), showing northeastern (left) and northwestern (right) gun emplacements, facing southwest. The Mortar Battery Data Booth (Building 128A) and Mortar Battery Powerhouse (Building 128) are at center rear. The walls and floor of the pit are covered by leaf litter and trees that began growing on the feature opportunistically after maintenance of it ceased.

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Photo 5. Entrance ramp to Battery Haskin Pit B after removal of opportunistic growth of trees in fall 2008, facing southeast. The Mortar Battery Data Booth associated with this pit (Building 127B), which formerly stood to the right of the pit's near corner, had been demolished by the time of this photograph.

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Photo 7. Southwestern corner of Battery Haskin Pit A showing unnumbered Data Booth (top left), entrance to tunnel system (right), and edge of platform for mortar emplacements (foreground), facing southwest. Note exposed bedrock of southern wall of pit (left). Photograph was taken after the opportunistic growth of trees was removed from pit floor and walls in fall 2008.

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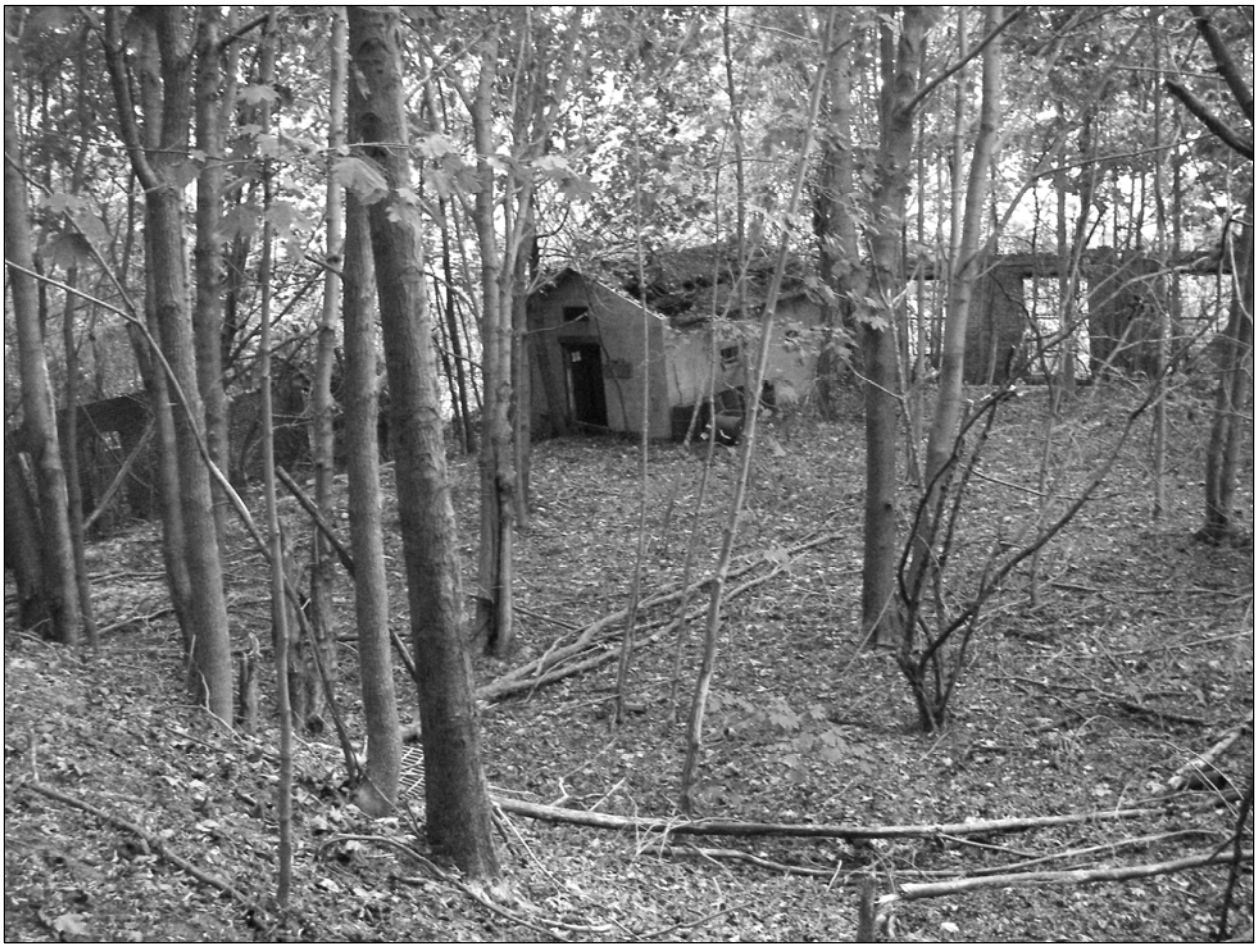

Figure 9. View across footprint of south wing of Ordnance Storehouse/Laundry (Building 110) after its demolition, facing southwest. Photograph looks toward Pistol Range, located in the woods, which occupies the former location of Battery Overton Pit A (demolished 1941-1942). Stone wall at center-left was constructed in ca. 1939 as a retaining wall when the south wing of Building 110 was built into the then-extant northeastern corner of the mortar pit earthwork.

Photo 10. Overton Lateral Tunnel, at junction of Main Tunnel, facing east-southeast toward blocked-off entrance to the now-demolished Battery Overton Pit A.

Photo 11. Storage Bay at north end of Main Tunnel, facing north-northeast.

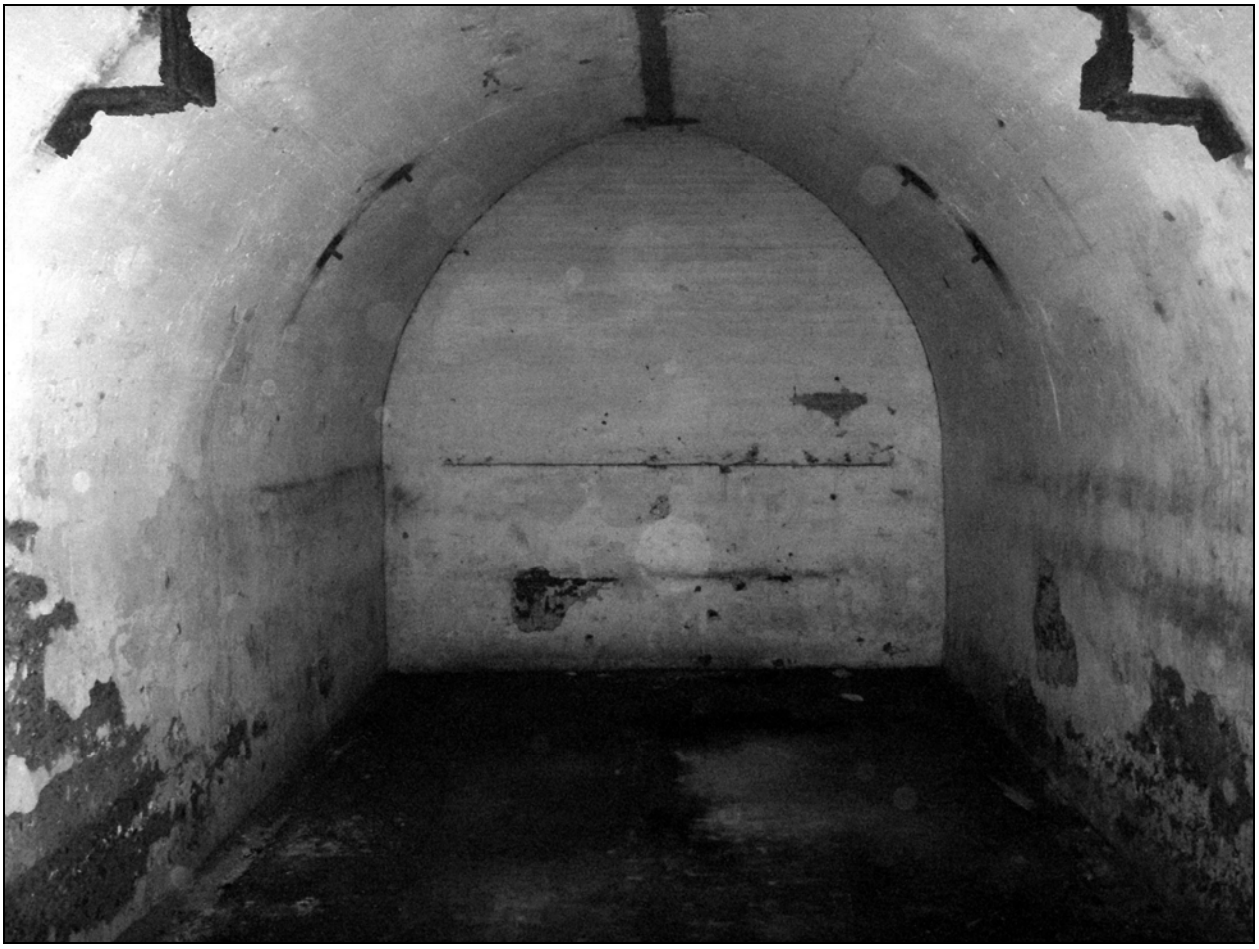

Photo 12. Junction of Main Tunnel and West Entrance Bay, facing southwest.

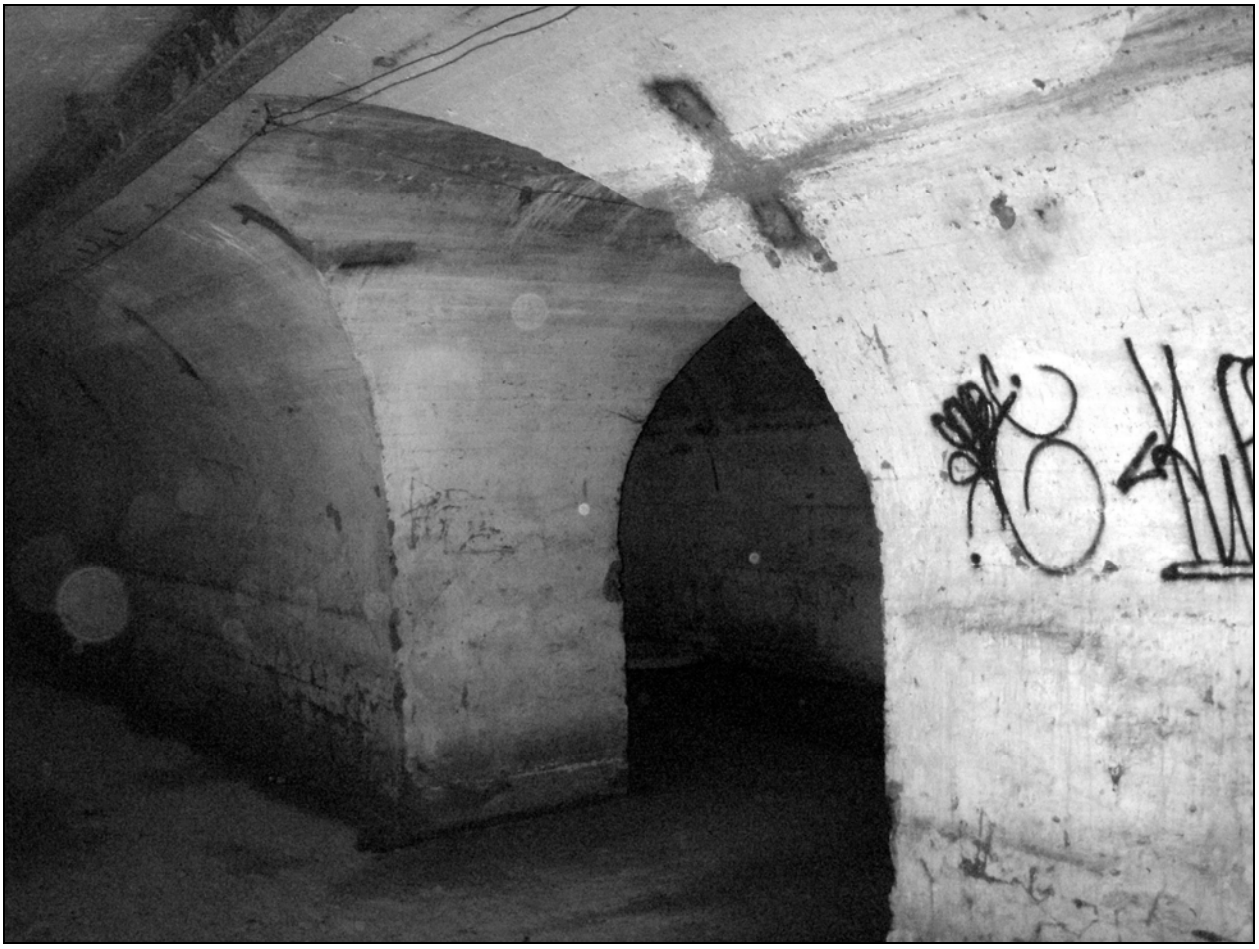

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Photo 14. 14. Gate to deter unauthorized visitors at entrance to Battery Haskin Pit B, facing southeast. Gate was installed in early 2009.

Photo 15. Gate to deter unauthorized visitors at entrance to tunnel in Battery Overton Pit B, facing southeast. Gate was installed in early 2009.

DAVIDS ISLAND – FORT SLOCUM HISTORICAL DOCUMENTATION

NIKE GENERATOR BUILDING (BUILDING 127A)

Location:	Davids Island–Fort Slocum 0.6 mi southeast of New Rochelle, New York mainland USGS Mount Vernon, NY Quadrangle UTM Coordinate (NAD 1983): 18.603631.4526235
Present Owner(s):	City of New Rochelle, NY
Date of Construction:	1954
Architect/Engineer:	U.S. Army Corps of Engineers
Present Use:	Abandoned when documented (2004-2007). Demolished 2008
Significance:	The Nike Generator Building (Building 127A) is situated in the Defense and Support Area, where it provided electrical power for the command and control facilities of Fort Slocum's Nike missile battery (active 1955-1960). It is representative of Fort Slocum's participation in a system of antiaircraft defenses built around New York City during the early period of the Cold War (1947-1963). The building is a contributing element to the Fort Slocum Historic and Archeological District.
Project Information:	The U.S. Army Corps of Engineers, New York District (Corps), has been authorized under the Department of Defense Appropriations Act, 2004, to perform building demolition, debris removal, and remediation of asbestos materials (Project) at the Fort Slocum on Davids Island in the City of New Rochelle, New York. The purpose of the Project is to remove buildings and infrastructure from the abandoned fort installation that create safety hazards as part of a long-range plan to restore Davids Island for future use. In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800), the Corps has consulted with the New York State Historic Preservation Officer (NYSHPO) regarding the effects of the Project on historic properties. The consultation resulted in the development of a Memorandum of Agreement (MOA) among the Corps, NYSHPO, County of Westchester, and City of New Rochelle as consulting parties. This documentation report was prepared in accordance with Stipulation II.C.1 of the MOA.
Prepared by:	C.L. Borstel, J.C. Sexton, R.M. Jacoby, S.B. Marshall, and C.W. Christopher
Title:	Cultural Resources Documentation Team
Affiliation:	Tetra Tech EC, Inc., Morris Plains, NJ
Date:	July 2007 (Revision 1, January 2010)

PART I. DESCRIPTION

The Nike Generator Building (Building 127A) is located in the southeastern quadrant of Davids Island. The island is in the western portion of Long Island Sound, 0.6 miles southeast of the New Rochelle, NY, mainland, and 19 miles northeast of Midtown Manhattan (Location Map and Site Map). Davids Island is a roughly pear-shaped, relatively flat landmass consisting of approximately 78 acres above mean high water. It is heavily wooded and contains the ruins of more than 100 buildings and structures associated with the now-abandoned U.S. Army post, Fort Slocum. The ruins include barracks and quarters; quartermaster, administrative, medical, and recreation buildings; and coastal and air defense facilities. A concrete and stone seawall encircles most of the shore, and a system of roads and paths runs throughout the island. Building 127A is located in the central portion of the Defense and Support Area. This section of Fort Slocum is a functionally-mixed area that adjoins and includes the 1891-1897 coastal artillery Mortar Battery.

Building 127A is one of several buildings and structures that remain from the Integrated Fire Control Area of Fort Slocum's Nike antiaircraft missile battery, which was active from 1955 to 1960 (Photos 1-5; Figures 1-3). This complex occupies the southern half of the post's former coastal artillery mortar battery and an adjacent area immediately to the west. Building 127A is situated near the southern edge of the old fortification, west of Battery Haskin Pit A (Building 125) and south of that battery's Pit B (Building 126). (The pits and other elements of the Mortar Battery are documented elsewhere in Volume 5 of *Documentation of Contributing Elements, Fort Slocum Historic and Archeological District, Davids Island, City of New Rochelle, New York.*) A short flight of concrete stairs leads up the incline that separates Building 127A from Building 124, the Nike Sighting Station, which is located about 60 feet to the northeast.

Building 127A is an unadorned, starkly functional building conforming to no named architectural style. It was designed for fast and economical construction and for a limited lifespan. The building is one story tall. It has a flat concrete-slab roof with an overhang of approximately 1 foot on all four sides. Two types of ventilation equipment are located toward the front of the roof; these include three cylindrical ventilators and three exhaust manifolds. The building has concrete block exterior walls and stands on a concrete slab foundation. It is in overall fair condition, but there is considerable damage due to vandalism and weather.

The Nike Generator Building is a modest rectangular-plan building that faces southwest. It measures approximately 29 feet-8 inches northwest-southeast by 24 feet-8 inches northeast-southwest. Within this footprint, the building is divided into two sections. The main section, to the south, measures approximately 22 feet-8 inches wide and comprises a single undivided room on the interior. The adjoining section, to the north, measures approximately 6 feet-10 inches wide and is divided into a back and a front room. These two sections of the building appear to be separated by a masonry wall, and on the southwestern and northeastern façades, the exterior wall of the smaller northerly section appears to abut that of the main section, rather than being integrated into it. These characteristics, among others, led Olausen et al. (2005) to propose that the bay on the north may have been added to the main section of the building soon after its initial construction; however, this inference remains unverified.

The primary façade of Building 127A faces southwest. It is dominated by a bank of three side-by-side pairs of double-leaf wood-frame paneled doors, centered across the main, or southern, section of the building. A historical photograph shows that the upper section of each door had fixed four-light glazing, while the lowest section was louvered (Figure 2). A sign painted on the concrete block masonry above

the bank of doors reads: "BTRY C 1st MSL. BN. 55st. [sic] ARTY". Painted-over portions of the lettering and the historical photograph of this entrance indicate the sign was altered from an earlier version following a change in units assigned to the Nike missile battery. This façade also has a door opening in its northern section, which is wide enough to have been occupied by one pair of double-leaf doors. However, the door is gone, and only the wood casing remains.

The northwestern façade has a single steel-frame nine-light awning-sash window. A large, fixed steel ventilation louver occupies a rectangular opening beneath the window. The northeastern façade has a single steel-frame window at its western end providing light and ventilation into a small room at the rear of the building, and no window or door openings in the building's main section. The southeastern façade has, near its eastern end, a double-leaf paneled wood-frame door similar to those on the front of the building. At its western end is a steel-frame nine-light awning-sash window, but without a louvered opening beneath.

The interior is divided into three rooms, a large main room on the east and two small rooms on the west. The walls and ceiling are covered in sheetrock. The floor is bare concrete. The rear wall of the main room is dominated by a circuit breaker boxes, switches, and other electrical controls. The floor has several channels cast or cut into it that apparently mark the positions of individual generators. Three exhaust pipes rise to the ceiling near the front of the building in this room. The small southwestern room also has channels cast or cut in its floor. A doorway connects it to the main room, and a narrow rectangular opening at chin height permits inspection from the adjoining rear room. The rear room, located in the northwestern corner of the building is connected to the main room by a metal swinging door labeled "Office" beneath its small one-light window pane.

PART II. HISTORICAL NARRATIVE

Fort Slocum

Davids Island is named for Thaddeus Davids (1816-1894), a New Rochelle ink manufacturer, who owned the island between 1856 and 1867. Davids was next-to-last in a line of private owners and lessees associated with the island between circa 1700 and the 1860s. During this period, the island was used primarily as farmland, but beginning probably in the 1840s, it also became a destination for excursionists who traveled by steamboat from New York and Brooklyn to picnic by the sea. The U.S. Army leased the island in 1862 and purchased it outright in 1867. In 1967, the federal government sold Davids Island to the City of New Rochelle, which sold it in turn the following year to Consolidated Edison Company of New York, Inc. Consolidated Edison returned ownership of most of the island to the city in 1976.

Two U.S. Army posts successively occupied Davids Island between 1862 and 1965. The earlier post was established as De Camp General Hospital in May 1862. The hospital treated wounded Union soldiers and, from 1863 onwards, also cared for Confederate prisoners of war. After the Civil War, the Army remained on the island, apparently using the post somewhat discontinuously as a hospital, mustering-out camp, and subdepot for recruits. By the early 1870s, the hastily-built wood frame buildings of the Civil War had deteriorated badly, and in October 1874 the Army entirely withdrew from the island, beginning a hiatus in occupation of nearly four years.

The Army returned in July 1878, when Davids Island was designated as a principal depot of the General Recruiting Service, supplanting Governors Island off lower Manhattan in that role. Originally known simply as Davids Island, the Army formally named the post Fort Slocum in 1896 to honor Maj. Gen. Henry Warner Slocum (1827-1894), a prominent Union soldier and New York politician. Recruit intake and training was a primary function of the post well into the twentieth century. Fort Slocum also saw service as an overseas embarkation station; hosted Army specialty schools for bakers, transportation officers, chaplains, public affairs personnel, and military police; provided retraining for court-martialed soldiers; and was an administrative center for the Air Force. Coastal artillery batteries operated at the post around the beginning of the twentieth century. During the Cold War, Fort Slocum supported an air defense missile battery.

When the post closed in 1965, Fort Slocum's landscape integrated elements from different episodes of development into a campus-like whole. Several episodes of development were represented, particularly 1885-1910 and 1929-1940. A few wood frame buildings remained from the late 1870s and early 1880s, and at least nine such buildings represented the Second World War. However, of the more than 50 temporary wood frame buildings erected during the First World War, only a single, partial example survived. Most of the buildings at Fort Slocum followed standard Army plans, but Army personnel or outside professional architects also produced a few designs specifically for the post. The permanent buildings at Fort Slocum generally reflected conservative and eclectic interpretations of different currents in American architecture, producing an engaging mix of Colonial Revival, Neoclassical, Romanesque, and Italianate styles. The temporary buildings around the post were in contrast unadorned and starkly utilitarian, as they were designed principally for speed of construction.

The period after Fort Slocum closed in November 1965 saw severe deterioration of the former Army post. The City of New Rochelle repeatedly sought to redevelop Davids Island, at one time considering a Consolidated Edison proposal to build a nuclear power plant and later supporting proposals for luxury residences. None of these plans materialized. Neglect and vandalism took a heavy toll on the former post. By the first decade of the twenty-first century, the landscape was overgrown, and the more than 100 buildings and structures that once comprised Fort Slocum were in decay and ruin.

Detailed accounts of Fort Slocum's history can be found in the general historic overview to this documentation series (Tetra Tech 2008) and in Olausen et al. (2005), among other sources.

Nike Generator Building (Building 127A)

Building 127A is one of ten numbered and inventoried buildings and structures or structure-components in the central part of Fort Slocum's Defense and Support Area. This functional area occupies the southeastern quadrant of Davids Island. The area contains a large earth and concrete fortification, Battery Haskin-Overton (Buildings 125-127), which was constructed in the last decade of the nineteenth century as an emplacement for 16 heavy mortars designed to be used against ships. The Mortar Battery was deactivated in 1906, and the mortars themselves were removed in 1920. Thereafter, the fortification was modified several times. Among other alterations, its contours were reshaped when it was incorporated into the post's small golf course in the mid-1920s, and the northeastern quadrant was demolished in the early 1940s for construction of a small-arms firing range.

In the mid-1950s, the southwestern quadrant of the Mortar Battery and an adjacent area to the west became the Integrated Fire-Control (IFC) Area of a Nike antiaircraft missile battery, designated as Battery

NY-15 (active 1955-1961). Battery NY-15 was part of a ring of such batteries erected around New York City to protect it from Soviet bombers. The IFC Area was responsible for target acquisition and missile guidance, as well as for the general administration of battery's personnel and operations. Its complementary section, the Launch Area, which contained the missiles, magazines, launchers, and related facilities, was situated on Hart Island, 1.5 miles to the southwest. (The Mortar Battery and associated elements are documented elsewhere in Volume 5 of *Documentation of Contributing Elements, Fort Slocum Historic and Archeological District, Davids Island, City of New Rochelle, New York*; additional comments on the Nike missile battery appear in the documentation for Building 124, also in Volume 5.)

The IFC Area of Battery NY-15 comprised a mix of existing buildings and new construction (Cavanaugh 2007; Lowery 2007). A map of the post from 1961 indicates that two of the five Second World War-era temporary barracks adjoining the mortar battery on the west were located inside the "Nike Site Control Area" (Buildings 130 and 133). (Buildings 131, 134, and 135 are outside the boundary shown by that map.) New construction included the Generator Building (Building 127A), the Sighting Station (Building 124), three concrete pads used for the trailer-mounted radars (now unnumbered, but designated in ca. 1957-1961 as Buildings 122, 123, and 126), and an electrical transformer vault (Building 127C) (Engineer Intelligence Division 1961; Office of Post Engineer 1949-1957).

The Nike Generator Building housed diesel-driven 400-cycle generators to power the critical operations of the IFC Area when commercial power was not available. Typically, the generators were brought on line when a battery went on alert, on the assumption that commercial power was likely to become unavailable in the event of an attack. When commercial power was being used, electrical converters changed domestic 60-cycle power to that required to operate the radar antennas and other components. The Generator Building also contained switches for shifting from commercial to locally-generated power (Carlson and Lyon 1996:59). The arrangement of exhaust pipes and grooves in the floor of Building 127A suggests it contained four generators, even though the Army's standard Nike IFC Area layout called for just three generators (Lonquest and Winkler 1996:173). Architectural evidence suggests that the building may have been expanded during the short lifespan of the battery to accommodate the fourth generator, but historical records relating to this alteration were not located during research for this project.

Fort Slocum's Nike missile installation was first manned by Battery D of the U.S. Army 66th Anti-Aircraft Missile Battalion, 1955-1958, and subsequently by the 1st Battalion, 55th Artillery, 1958-1961 (Bender 1999). This change unit assignment is reflected in the alterations to the identifying sign on the main façade of the generator building, as noted above in Part I.

It is unknown whether when first completed the Nike Generator Building was identified by a number in Fort Slocum's building inventory. However, in the 1957 revision of post's building numbering system, it was designated as Building 127. At some time after Fort Slocum closed, however, it became known as Building 121, possibly as a result of a transcription error. The structure is recorded as Building 121 in a 1986 historic architectural survey (Berger 1986), and this number is used to identify it in subsequent correspondence based on the 1986 survey. During the architectural reconnaissance conducted by the Public Archaeology Laboratory, Inc. (PAL), and Tetra Tech in November 2004, the Nike Generator Building was designated as Building 127A (Olausen et al. 2005).

PART III. SOURCES OF INFORMATION

Published Materials

Carlson, Christina M., and Robert Lyon
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Maps and Drawings

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December 1961 "Map of Fort Slocum (Davids Island), New Rochelle, N.Y." Prepared under the direction of the First Army Engineer by the Engineer Intelligence Division, Governors Island, New York. Record Group 92, National Archives, College Park, MD.

Aerial Photographs

(Except as noted, all photographs are on file at National Archives, College Park, Maryland. Digital copies examined for this research come from the Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.)

1924: Vertical aerial photograph of Davids Island. August 24.

1932: Low angle oblique aerial photograph of Davids Island. View north. January 11.

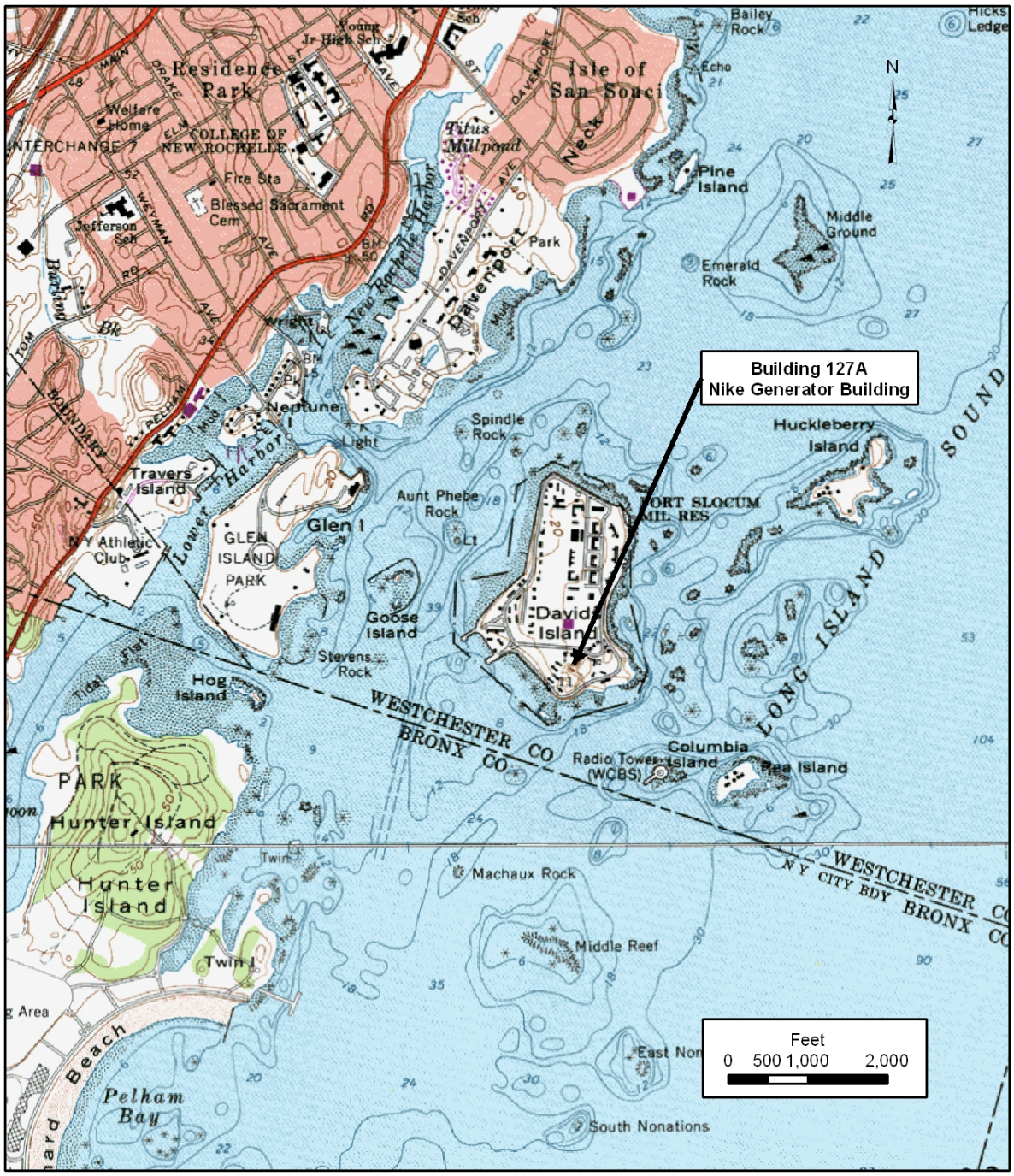
1940: Vertical aerial photograph of Davids Island. September 4.

1954: Vertical aerial photograph of Davids Island, New Rochelle, NY. Date and originating agency unknown. Available online in a georeferenced photo mosaic version through HistoricAerials.com at http://www.historicaerials.com. Accessed November 23, 2009.

ca. 1958: High angle oblique aerial photograph of Davids Island. View north. Summer. Included in a 1966 report prepared by Cross & Brown Co., New York, for the Federal Property Resources Service, on file at the New York City branch of the National Archives, Record Group 291.

1961: High angle oblique aerial photograph of Davids Island. View north. November 15. Attributed to Capt. Donald P. Blake. In the Fort Slocum Alumni and Friends Collection.

LOCATION MAP (USGS Mount Vernon, NY)
Scale: 1:24,000
1966 (Photorevised 1979)



SITE MAP

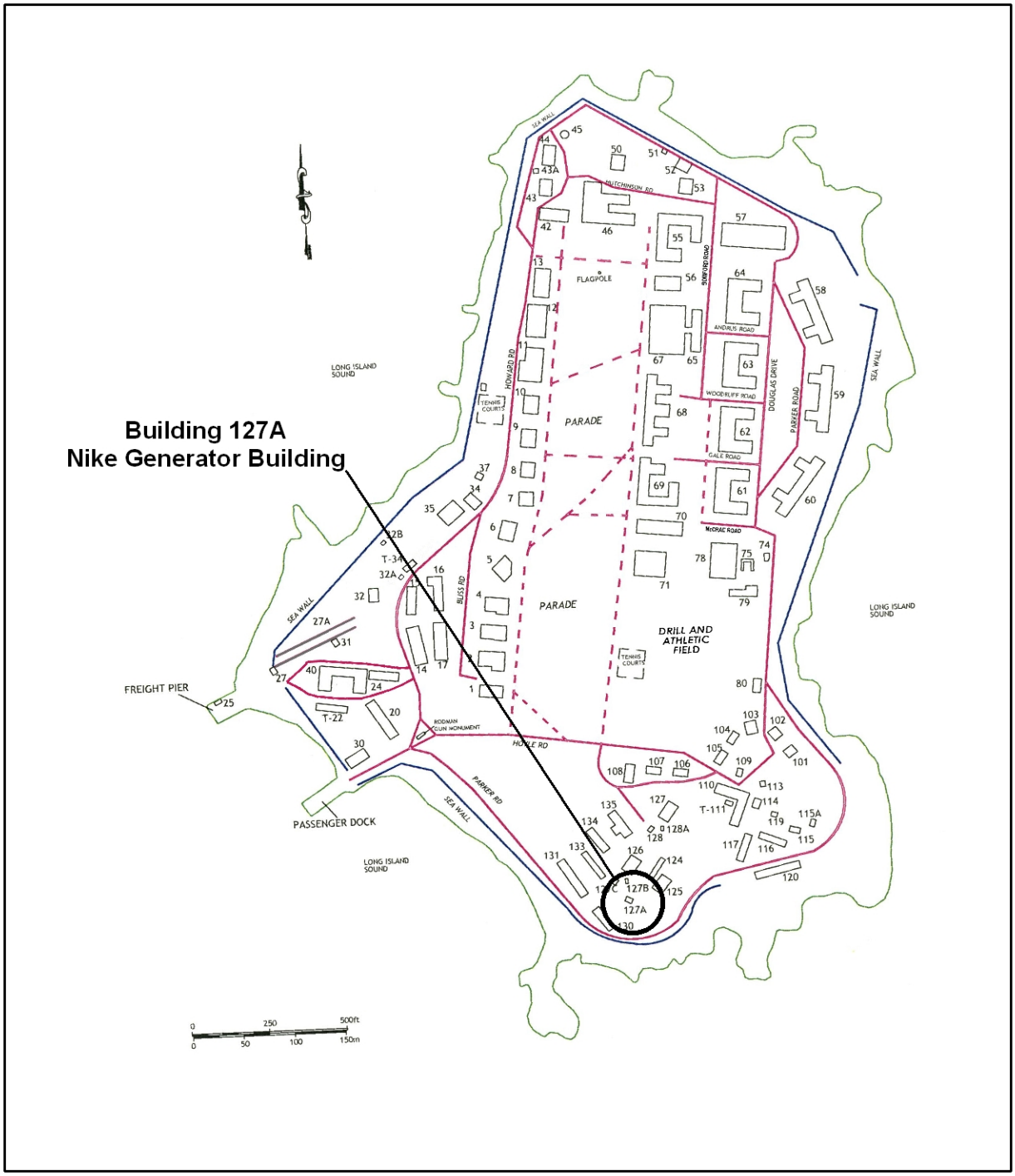

Building 127A
Nike Generator Building
PARADE
PARADE
DRILL AND ATHLETIC FIELD
TENNIS COURTS
TENNIS COURTS
FLAGPOLE
HUTCHINSON RD
STORRS ROAD
ANDRUS ROAD
WOODRUFF ROAD
GALE ROAD
McCRAE ROAD
DOUGLAS DRIVE
PARKER ROAD
HOWARD RD
BLISS RD
HUGLE RD
SEA WALL
LONG ISLAND SOUND
FREIGHT PIER
PASSENGER DOCK
RODMAN GUN MONUMENT
T-34
T-22
T-111
127B
127A
0 250 500ft
0 50 100 150m

Figure 1. High angle oblique aerial photograph of Davids Island, ca. 1958, detail. View north. Labels have been added to this version of the image to indicate buildings and structures included in the Nike Battery NY-15 IFC Area. The battery's three radar sets are visible in this image and are labeled as follows: MTR—missile tracking radar; ACK—target acquisition radar; and TTR—target tracking radar. Building 127A is near the center of the image. Original from Record Group 291, National Archives, New York, NY; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.

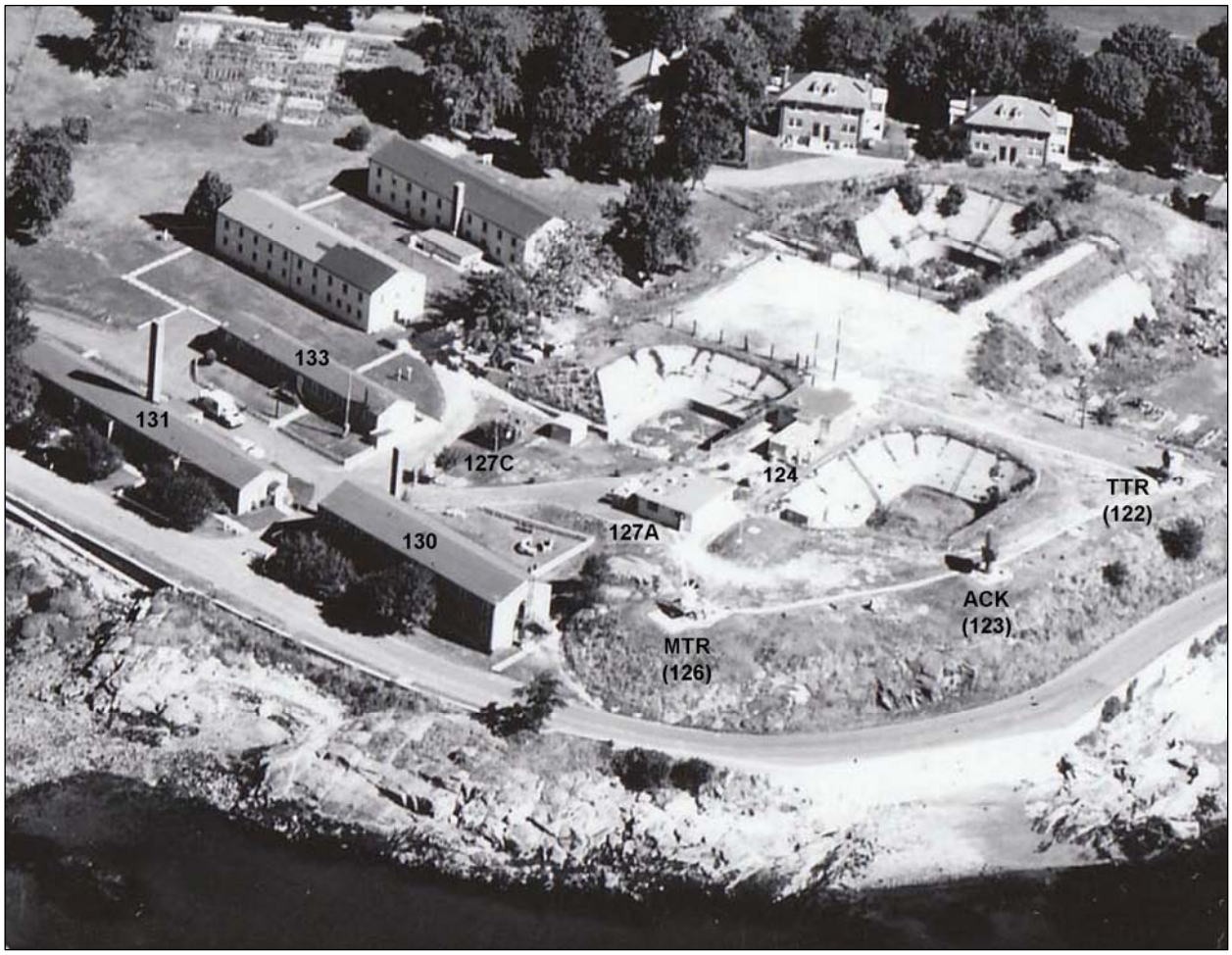


Figure 2. Southwestern façade of Building 127A, ca. 1959, detail: bank of three side-by-side pairs of double-leaf wood-frame paneled doors, facing north. Note the partial repainting of the unit identification above the doors (compare Photos 1 and 2 in the existing conditions photographs below). Photocopied snapshot taken by former Spec. 4 Rich Lowery, who served as a radar technician at Fort Slocum's Nike missile battery from 1959 to 1961. Tetra Tech Oral History Project files, Lowery Collection, Morris Plains, NJ.

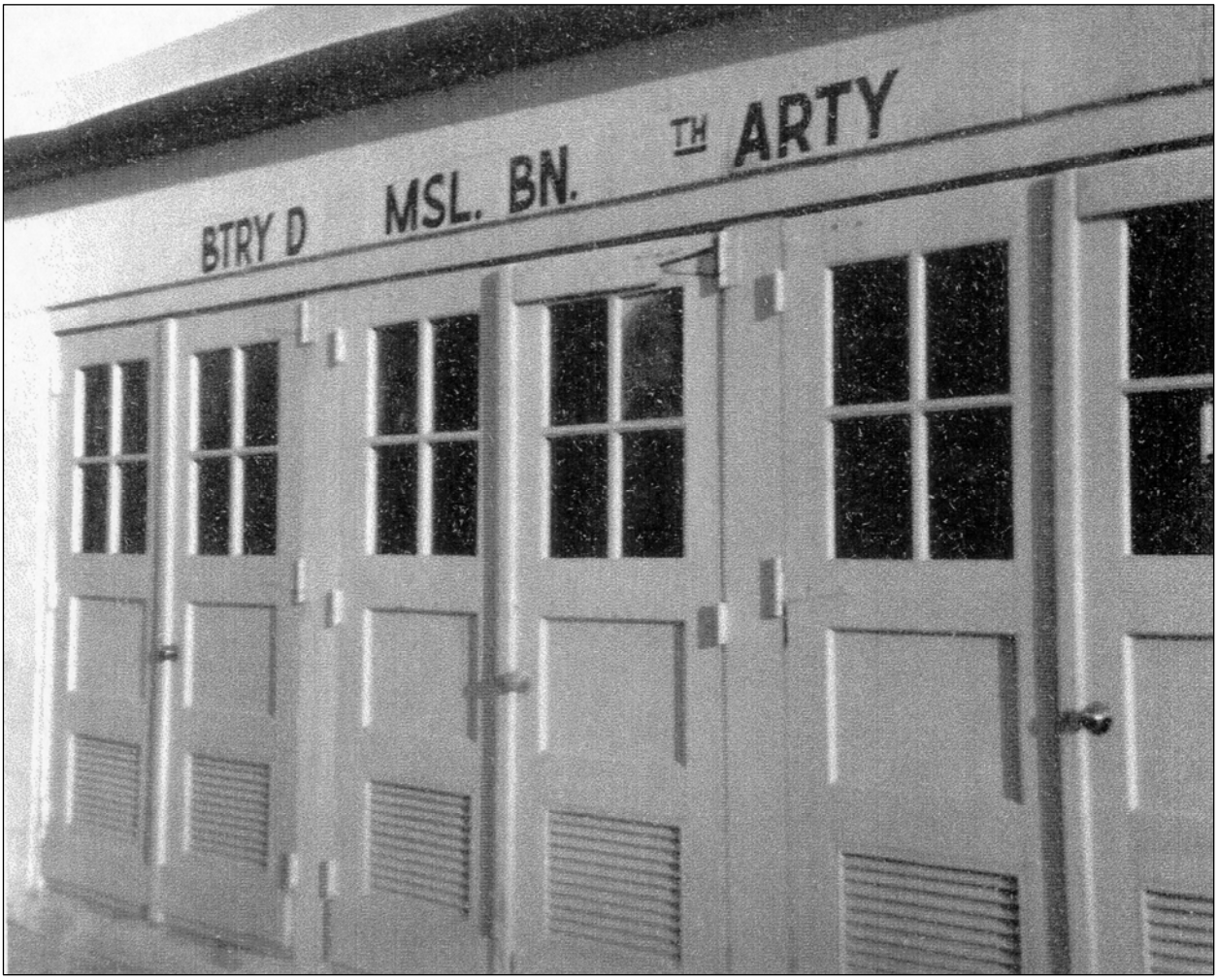
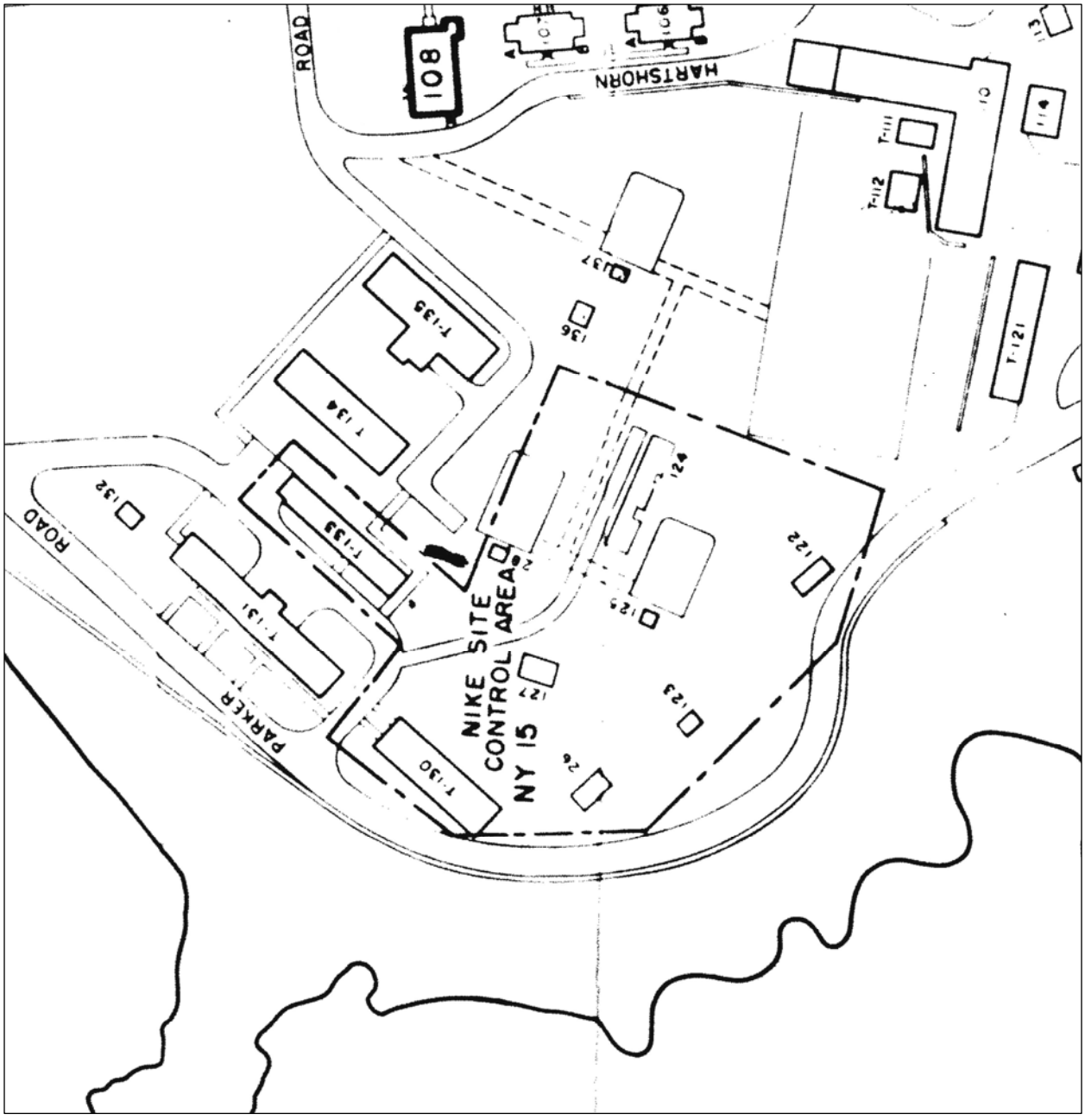


Figure 3. "Map of Fort Slocum (Davids Island), New Rochelle, N.Y.," revised through December 1961, detail showing the Nike battery IFC Area (labeled "Nike Site Control Area NY 15") and adjoining areas at the southern end of Davids Island. North is to the top of the page. Building 127A, here labeled as Building 127, appears near the center of this image. Record Group 92, National Archives, College Park, MD.



HISTORICAL DOCUMENTATION

INDEX TO PHOTOGRAPHS

NIKE GENERATOR BUILDING (BUILDING 127A)
Davids Island—Fort Slocum
New Rochelle
Westchester County
New York

Photographers: Matt Kierstead, PAL Inc., Pawtucket, RI, November 2005 (Photos 1 and 5).
Caleb Christopher, Tetra Tech EC, Inc., Morris Plains, NJ, November 2006 (Photos 2-4).

1. Southwestern façade, facing northeast.
2. Southwestern façade, detail of sign showing unit assigned to battery, facing north.
3. Northwestern façade, facing northeast.
4. Southeastern façade, facing north.
5. Main room interior, facing north. Fuse boxes and other electrical controls on northeastern wall.

Photo 1. Southwestern façade, facing northeast.

Photo 2. Southwestern façade, detail of sign showing unit assigned to battery, facing north.

Photo 3. Northwestern façade, facing northeast.

Photo 4. Southeastern façade, facing north.

Photo 5. Main room interior, facing north. Fuse boxes and other electrical controls on northeastern wall.

DAVIDS ISLAND – FORT SLOCUM HISTORICAL DOCUMENTATION

MORTAR BATTERY DATA BOOTH, BATTERY HASKIN PIT B (BUILDING 127B)

Location:	Davids Island–Fort Slocum 0.6 mi southeast of New Rochelle, New York mainland USGS Mount Vernon, NY Quadrangle UTM Coordinate (NAD 1983): 18.603619.4526254
Present Owner(s):	City of New Rochelle, NY
Date of Construction:	ca. 1904
Architect/Engineer:	U.S. Army Corps of Engineers
Present Use:	Abandoned when documented (2004-2007). Demolished 2007
Significance:	The Mortar Battery Data Booth (identified as a "Fire Control Building" in earlier project documentation) for Battery Haskin Pit B (Building 127B) is a component of Fort Slocum's Mortar Battery. The battery was completed in its original form in 1897. It is situated in the post's Defense and Support Area. The data booth, one of four built in ca. 1904 as additions to the Mortar Battery, transmitted targeting data from the battery commander to the mortar crews in Pit B of Battery Haskin. It thereby supported the post's role in early twentieth-century coastal defense. The building is a contributing element to the Fort Slocum Historic and Archeological District.
Project Information:	The U.S. Army Corps of Engineers, New York District (Corps), has been authorized under the Department of Defense Appropriations Act, 2004, to perform building demolition, debris removal, and remediation of asbestos materials (Project) at the Fort Slocum on Davids Island in the City of New Rochelle, New York. The purpose of the Project is to remove buildings and infrastructure from the abandoned fort installation that create safety hazards as part of a long-range plan to restore Davids Island for future use. In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800), the Corps has consulted with the New York State Historic Preservation Officer (NYSHPO) regarding the effects of the Project on historic properties. The consultation resulted in the development of a Memorandum of Agreement (MOA) among the Corps, NYSHPO, County of Westchester, and City of New Rochelle as consulting parties. This documentation report was prepared in accordance with Stipulation II.C.1 of the MOA.
Prepared by:	Christopher L. Borstel, Ph.D.
Title:	Cultural Resources Specialist
Affiliation:	Tetra Tech EC, Inc., Morris Plains, NJ
Date:	July 2007 (Revision 1, January 2010)

PART I. DESCRIPTION

The Mortar Battery Data Booth for Battery Haskin Pit B (Building 127B)—formerly called a "Fire Control Building" (Olausen et al. 2005)—is located in the southeastern quadrant of Davids Island. The island is in the western portion of Long Island Sound, 0.6 miles southeast of the New Rochelle, NY, mainland, and 19 miles northeast of Midtown Manhattan (Location Map and Site Map). Davids Island is a roughly pear-shaped, relatively flat landmass consisting of approximately 78 acres above mean high water. It is heavily wooded and contains the ruins of more than 100 buildings and structures associated with the now-abandoned U.S. Army post, Fort Slocum. The ruins include barracks and quarters; quartermaster, administrative, medical, and recreation buildings; and coastal and air defense facilities. A concrete and stone seawall encircles most of the shore, and a system of roads and paths runs throughout the island. The data booth is situated on and is an element of Fort Slocum's Battery Haskin-Overton and is specifically associated with Pit B of Battery Haskin (Building 126). The Mortar Battery is a concrete and earth fortification that dominates the terrain of the southeastern end of Davids Island and occupies the central portion of the Defense and Support Area. This area is a functionally-mixed section of Fort Slocum that, in addition to fortifications and defensive structures, also includes utility and support-services buildings, women's barracks, and other types of structures.

Building 127B was one of three mortar battery data booths that were extant when the historic architectural inventory of former Fort Slocum was completed in 2004 (Olausen et al. 2005). The buildings were similar to one another and were derived from a common design. Each building served one mortar pit. Building 127B was an element of Battery Haskin Pit B (Building 126), while Building 128A was an element of Battery Overton Pit B (Building 127). Both buildings were formally inventoried by Olausen et al. (2005) and were subsequently documented individually. The third building, an unnumbered element of Battery Haskin Pit A (Building 125), was neither inventoried nor documented. As of the completion of the building demolition at former Fort Slocum in early 2009, Building 127B had been razed, but Building 128A and the unnumbered structure remained extant. A fourth data booth, associated with Battery Overton Pit A and also unnumbered, was demolished in ca. 1942, when the northeastern quadrant of the Mortar Battery was leveled to construct a small-arms firing range.

As observed at the time of the architectural inventory and documentation fieldwork (2004-2007), Building 127B is situated at the left rear—i.e., southwestern—corner of Battery Haskin Pit B. It stands just south of the entrance ramp to Battery Haskin. Aerial photographs from the 1920s indicate that, like the other data booths associated with Battery Haskin-Overton, Building 127B occupied a platform that had been cut into the traverse (earth mound) adjoining the ramp. This original setting is no longer evident, because the surrounding earthwork was later flattened and now slopes gently to the southwest from the lip of the ramp's retaining wall.

Building 127B is a small monolithic concrete building comprised of an integral foundation slab, walls, and roof (Figures 1-2; Photos 1-4—see also photographs in documentation for Building 128A, elsewhere in Volume 5). The concrete appears to be similar to that used throughout the Mortar Battery, as well as in the revetment wall remnant of nearby Battery Practice. The concrete is tough, relatively non-porous, and solid. It is made with abundant large dark angular aggregate, probably local crushed stone. There is no indication in any exposed surface of the building that steel reinforcing rods or mesh was employed, but a historical account says that structures of this type were constructed of reinforced concrete (Winslow 1920:359). Faint horizontal trace impressions of the concrete formwork are visible on the exterior and interior walls. On the exterior walls, these marks are somewhat obscured by a surface texture that alternates between smooth and rough lenticular, camouflage-like patches. (It is unclear whether this

pattern of patches is intentional or fortuitous.) The interior walls are smooth, and the form marks are more plainly visible. The forms for these buildings were constructed with care, as is indicated by small details, such as the chamfered edges of the door openings, the beveled window openings, and the stepped profiles of the joins between the walls and roof. Traces of painted signs and labels remain on the exterior walls of Building 127B. Only one of these is still partially legible. This is sign is located on the southern wall and appears to read: "NO SMOKING / [Within] /50 Feet." The interior walls of the building are also painted, but crudely. (The painted walls of Building 127B do not appear to be the work of post-abandonment visitors to Fort Slocum, unlike the painted graffiti found in some other places on Davids Island, including Building 128A, the data booth associated with Battery Overton Pit B.)

Building 127B is approximately 10 by 11 feet on the exterior and stands about 8 feet high from the ground to the top of the roof. Its walls are 15 to 18 inches thick. The flat roof overhangs the building's walls by 3 inches. The overhanging section of the roof is around 6 inches thick but the main part of the roof, which covers the building interior, is about 12 inches thick. There is a single entrance on the western side of the building, which faces away from the mortar pit. The entrance has a hollow door of riveted steel. The door is designed to slide open and hangs from two wheels that travel on a steel rail affixed to the building's exterior wall.

As originally constructed, Building 127B had three small windows at the northeastern corner, which overlooks the mortar pit. One window each was located in the northern and eastern walls, and a third window cut across the corner itself. However, because of a later alteration the windows have been almost completely sealed over in this building and also in the unnumbered data booth associated with Battery Haskin Pit A. In place of the original window openings, the two sealed-over wall windows now contain pairs of small square portals about 3 inches on a side that the interior to the outside and probably served as vents. There are no portals in the now-closed opening for the corner window.

A tall slot in the eastern wall is fitted with a steel signboard frame, which extends from the interior to the exterior of the building. The frame, which is partially intact, carried five sliding panels on I-channels. These panels, designed to have targeting information written on them in chalk, could be pushed out of the building through the slot and pulled back in. Aside from the steel signboard frame, the interior of Building 127B as built is plain. The enclosed space has a floor of approximately 7 by 8 feet and is about 6 feet-6 inches from floor to ceiling. The walls are sheer, and there are no niches, notches, shelves, or similar details cast into them. Crude wood shelving is built against the eastern interior wall of Building 127B, and a 2- by 4-inch stud with several protruding nails apparently intended to serve as simple hangers is attached to the northern wall. These interior elements certainly post-date the original function of the building. During examination of the Mortar Battery's data booths, one or more conduits for wiring were observed to lead through the wall to the exterior, but no details were noted, and no interior wiring was evident in Building 127B or in the other booths.

PART II. HISTORICAL NARRATIVE

Fort Slocum

Davids Island is named for Thaddeus Davids (1816-1894), a New Rochelle ink manufacturer, who owned the island between 1856 and 1867. Davids was next-to-last in a line of private owners and lessees associated with the island between circa 1700 and the 1860s. During this period, the island was used primarily as farmland, but beginning probably in the 1840s, it also became a destination for excursionists

who traveled by steamboat from New York and Brooklyn to picnic by the sea. The U.S. Army leased the island in 1862 and purchased it outright in 1867. In 1967, the federal government sold Davids Island to the City of New Rochelle, which sold it in turn the following year to Consolidated Edison Company of New York, Inc. Consolidated Edison returned ownership of most of the island to the city in 1976.

Two U.S. Army posts successively occupied Davids Island between 1862 and 1965. The earlier post was established as De Camp General Hospital in May 1862. The hospital treated wounded Union soldiers and, from 1863 onwards, also cared for Confederate prisoners of war. After the Civil War, the Army remained on the island, apparently using the post somewhat discontinuously as a hospital, mustering-out camp, and subdepot for recruits. By the early 1870s, the hastily-built wood frame buildings of the Civil War had deteriorated badly, and in October 1874 the Army entirely withdrew from the island, beginning a hiatus in occupation of nearly four years.

The Army returned in July 1878, when Davids Island was designated as a principal depot of the General Recruiting Service, supplanting Governors Island off lower Manhattan in that role. Originally known simply as Davids Island, the Army formally named the post Fort Slocum in 1896 to honor Maj. Gen. Henry Warner Slocum (1827-1894), a prominent Union soldier and New York politician. Recruit intake and training was a primary function of the post well into the twentieth century. Fort Slocum also saw service as an overseas embarkation station; hosted Army specialty schools for bakers, transportation officers, chaplains, public affairs personnel, and military police; provided retraining for court-martialed soldiers; and was an administrative center for the Air Force. Coastal artillery batteries operated at the post around the beginning of the twentieth century. During the Cold War, Fort Slocum supported an air defense missile battery.

When the post closed in 1965, Fort Slocum's landscape integrated elements from different episodes of development into a campus-like whole. Several episodes of development were represented, particularly 1885-1910 and 1929-1940. A few wood frame buildings remained from the late 1870s and early 1880s, and at least nine such buildings represented the Second World War. However, of the more than 50 temporary wood frame buildings erected during the First World War, only a single, partial example survived. Most of the buildings at Fort Slocum followed standard Army plans, but Army personnel or outside professional architects also produced a few designs specifically for the post. The permanent buildings at Fort Slocum generally reflected conservative and eclectic interpretations of different currents in American architecture, producing an engaging mix of Colonial Revival, Neoclassical, Romanesque, and Italianate styles. The temporary buildings around the post were in contrast unadorned and starkly utilitarian, as they were designed principally for speed of construction.

The period after Fort Slocum closed in November 1965 saw severe deterioration of the former Army post. The City of New Rochelle repeatedly sought to redevelop Davids Island, at one time considering a Consolidated Edison proposal to build a nuclear power plant and later supporting proposals for luxury residences. None of these plans materialized. Neglect and vandalism took a heavy toll on the former post. By the first decade of the twenty-first century, the landscape was overgrown, and the more than 100 buildings and structures that once comprised Fort Slocum were in decay and ruin.

Detailed accounts of Fort Slocum's history can be found in the general historic overview to this documentation series (Tetra Tech 2008) and in Olausen et al. (2005), among other sources.

Mortar Battery Data Booth, Battery Haskin Pit B (Building 127B)

Building 127B is a component of the Endicott-era Mortar Battery, formally called Battery Haskin-Overton (Buildings 125-127), which was constructed on Davids Island in the early to mid-1890s and improved thereafter. The battery was operational from 1897 to 1906, and it served as part of a network of coastal fortifications defending the approaches to New York Harbor. It was one of the first of its type constructed on the American coast following the 1886 recommendations of a special commission on the nation's coastal defenses, popularly known as the Endicott Board (Ranson 1967). The Fort Slocum battery had four mortar pits each mounting four 12-inch heavy mortars, for a total of 16 weapons. The principal role of coastal mortar batteries like the one at Fort Slocum was to prevent enemy warships from approaching a port close enough to shell it. The original concept was to prevent warships from shelling the port while at anchor, but as both naval and coastal artillery gunnery improved in the 1890s and 1900s, the role of the batteries expanded to attacking moving vessels. The mortars were designed to fire large explosive projectiles at high angles that would rain down on a ship's lightly armored decks. Normally, several mortars would fire simultaneously to create a shotgun-like fall of projectiles. Fort Slocum's mortars, among the first to come into service, had a maximum range of around 5.5 miles and fired projectiles weighing about 800 pounds. Each group of four mortars occupied a deep pit surrounded by high earth walls with concrete revetments. The Mortar Battery's large earthwork, combined with reinforced concrete construction of critical structural components and the use of subterranean connecting tunnels and storerooms, was designed to make the batteries resistant to direct-fire naval guns. The Mortar Battery and its history are described in greater detail elsewhere in Volume 5 of *Documentation of Contributing Elements, Fort Slocum Historic and Archeological District, Davids Island, City of New Rochelle, New York.*

Building 127B was one of four data booths that once stood on Battery Haskin-Overton. In earlier historic architectural inventories and studies of Fort Slocum (such as Olausen et al. 2005), these structures were identified as "fire control buildings." This term is somewhat misleading, however, because as used in the modern sense and also sometimes historically, fire control is concerned with the total direction of artillery fire, including the discovery and identification of targets, the assignment of targets to specific units, the selection of ammunition, predicting the future location of the target, and when to fire (McGovern and Smith 2006:51). The small booths on Battery Haskin-Overton played a role in a system of control, but did not direct it, as they only served as mechanical transmitters of targeting information to mortar crews from the battery commander and his plotters, who were located outside the battery (Winslow 1920:342-368). Historically, these structures were called "mortar battery booths" or "telephone booths," and are often identified on fortification plans by the abbreviation "T.B." This abbreviation appears, for example, on a record drawing of Battery Haskin-Overton made in 1920 (Army Corps of Engineers 1920; Smith 2007). While the term "telephone booth" is historically accurate, it too is potentially misleading, for it brings to mind that ubiquitous element of twentieth-century built landscapes and public spaces, the public pay-phone booth. "Data booth" is used in the current literature on American coastal fortifications to convey the role of these structures in transmitting information (e.g., Hoffman 2007:29; Manuel 2004:79).

Four data booths, including Building 127B, were added to Battery Haskin-Overton in about 1904. Their construction came after more than a decade of study and experimentation on the entire range of factors related to coastal artillery fire control. During this period of development, artillery officers in the U.S. Army wrestled with a wide range of problems as they sought to enhance the effectiveness of the vast system of coastal fortifications then being built along America's coastlines. Among these problems were developing an effective system of range-finding and prediction of future target motion, ascertaining all

the critical factors affecting the flight path of a projectile, and providing for rapid, clear communication among commanders, observers, plotters, and the artillery crews (McGovern and Smith 2006:51-53; Morse 1913; Winslow 1920:303-368). Resolution of these issues was especially important for increasing the effectiveness of the heavy mortar batteries, whose crews could not see their targets, which was a particularly striking feature of these fortifications to civilian observers of the 1890s (New York Times 1891, 1895). The issues also became more pressing for direct-fire artillery as both their range and speed of firing and that of naval guns rapidly increased around the turn of the century.

By around 1903, the Army had the outlines of a workable fire control system in view, and it began to deploy and refine the system as quickly as funds became available from Congress. New York Harbor was among the Army's top priorities for the installation of improved fire control, and, indeed, by early 1906, the improvements at the three fortifications guarding the eastern approach to the harbor, forts Slocum, Schuyler, and Totten, were said to be further advanced than anywhere else (Mackenzie and Abbot 1904, 1906). Addition of the data booths to Battery Haskin-Overton, then, was just one element of a program of upgrades at Fort Slocum, which also included installation of a searchlight system and construction of a concrete and steel tower for the battery commander. These improvements were apparently never fully implemented, however, for the Army removed Fort Slocum from active duty as a coastal artillery installation in January 1906 (War Department General Order 22-1906).

The data booths constructed at Fort Slocum's Mortar Battery were derived from designs first built at Portland, Maine, in 1903. According to a period description, a Portland-type mortar battery booth was:

> …a reinforced concrete structure about 7 by 8 feet in plan, with about 6½ feet headroom inside. The walls and ceilings of the building, as well as the sliding metal door, [were] all made strong enough to stand the effect of the blast [from firing the mortars], and it [was] therefore possible to locate such booths only a few feet to the rear of a mortar pit…. [A]iming data [was] displayed by chalk figures written upon sliding sections of blackboard… [that could be] drawn into the booth… [and] then pushed out so as to be visible to the men in the pits. For use at night, these boards… [were] illuminated by electric lights in shielded hoods…. In the front… corner of the booth... [were] windows… by which the men inside [could] see what [was] going on in the mortar pit….
>
> The booth was directly connected by telephone with the plotting room. The aiming data, as soon as it was worked up in the plotting room, was transmitted by telephone to the men in the booth who quickly wrote it on the blackboards and then slid them out for the information of the men in the pit. If desired, it was planned that the mortars might be fired from the booth (Winslow 1920:359).

Although the first such booths were located on the floors of the mortar pits, it quickly became evident that they needed to be on a level well above the floor so the data could be easily seen by everyone at work on the mortars (Winslow 1920:360). An elevated location is a feature of Fort Slocum's data booths.

All in all, the Portland data booths apparently transmitted targeting data adequately, but they suffered from some drawbacks. Among these was the tendency of the chalked data to become obscured or wash away entirely in wet weather. Another type of booth, developed around the same time as the Portland booth at Fortress Monroe, Virginia, used wood slides with painted numbers, but this system, too, had its limitations (Winslow 1920:360).

In a standard plan for Portland-type data booths, the building was located at the right rear corner of the pit. The sliding blackboard projected from the rear of the left side of the booth, while the windows were in the building's front left-hand corner (Winslow 1920:359). (By convention, the front of an artillery emplacement is in the direction of the enemy, or northerly for Fort Slocum's Mortar Battery.) The data booths of Fort Slocum's Mortar Battery occupied the opposite, left rear, corner and their layouts were mirror images of this standard plan. Such deviations from standard plans were common, according to Congressional testimony given by Maj. Frederic V. Abbot, Assistant to the Chief of Engineers. During an appropriation subcommittee hearing in early 1906, Maj. Abbot remarked that although the Army had standard plans for batteries and their many accoutrements, for actual construction an engineer had to "go to the separate individual batteries and find out in each case every idiosyncrasy or characteristic and adopt a plan that will agree in the general result with those type plans, though perhaps differing in many details" (Mackenzie and Abbot 1906:10). Also, according to Maj. Abbot, planning for construction of data booths and other elements of a fortification's fire-control system was time-consuming, but construction was quick because the buildings were small: "fire control is peculiar in… that it takes a very short time to expend a great deal of money, as there are a great number of small buildings which can be erected quickly, but it takes a long time to get the plans" (Mackenzie and Abbot 1906:14).

Research to date has provided no specific information on the date of construction for the data booths at Fort Slocum.[1] The booths are not depicted on any available map of the post until after 1920, and this is also the date when aerial photographs of it first become available. The general trend of historical development of fire control for coastal artillery combined with other information, such as the date of the withdrawal of Fort Slocum's batteries from active service at the beginning of 1906 and the type of booth erected, points to construction in 1904 or 1905. Since the battery commander's observation tower was completed at Fort Slocum in 1904 (Army Corps of Engineers 1920), it has been assumed that other improvements were also taking place at the post around the same time, and the structures have been assigned build-dates of ca. 1904.

After the coastal artillery emplacements at Fort Slocum were withdrawn from active service in 1906, they entered caretaker status, and for the next dozen or so years sufficient preventive maintenance was done to them to allow their return to service if required. By the First World War, the Army deemed the fortifications of limited military value and began withdrawing their artillery. This process was completed by April 1920, and the Coast Artillery abandoned Fort Slocum's fortifications entirely. Alterations began soon after. Among these modifications was the installation of part of a small nine-hole golf course on the Mortar Battery in 1926 and demolition of its northeastern quadrant to allow construction of a small-arms firing range in 1941-1942. During the 1950s, the Mortar Battery was further modified by the construction of a Nike antiaircraft missile fire-control facility on it and removal of some earthwork soil from the fortification's western side.

At some point, two of the data booths, Building 127B and the unnumbered structure associated with Battery Haskin Pit A were altered by sealing over the window openings and adding crude interior shelving. Whether this happened more or less at the same time or sequentially is unknown. The no-smoking sign painted on the side of Building 127B and the retention of the small portals in the former

[1]The author became aware that the booths were not part of the Mortar Battery's original design after correspondence with Smith (2007), whose comments included this key remark: "[Fort Slocum's] batteries were built before… [firing data communication systems were] sufficiently perfected, and so the booths were added somewhat later."

windows indicate that both buildings were converted into storage lockers for flammables or explosives. The door of the unnumbered data booth provides further evidence concerning these alterations. Traces of two painted signs indicate later uses of this building. A faint sign in neat block letters reads: "BASE ORDNANCE / MAGAZINE 2." A second sign is crudely painted over this one: "AFIS / PAINT / STORAGE / KEY TO / LOCK / AT / EXT / 299." No similar signage is preserved on the more heavily corroded door of Building 127B. Fort Slocum had an active Ordnance Department during the Second World War (Fort Slocum Historical Report 1942:36), while "AFIS" refers to the Armed Forces Information School, which was active at Fort Slocum between 1951 and 1954 as the predecessor of the Army Information School (later Defense Information School), the last activity to leave the post before it closed in 1965. These details indicate that the unnumbered data booth was probably converted for ammunition storage during the Second World War and then used for paint storage in the early 1950s. The data booths would have been excellent for such purposes, as they were dry, fire-proof, and isolated. Given the similarities of the alterations, it is reasonable to infer that Building 127B was altered at the same time as the unnumbered booth. However, it is also possible that the two buildings were altered sequentially, with Building 127B modified only after the unnumbered booth became inaccessible in late 1954 because it had been incorporated into the secure, fenced compound of the Nike Integrated Fire-Control Area.

Building numbers were not assigned to any element of the mortar battery complex until late 1957. At that time, the data booth associated with Battery Haskin Pit B (the present Building 127B) seems to have been numbered as Building 128. The other extant booths were designated as Buildings 126 (Haskin Pit A) and 137 (Overton Pit B). The pits themselves do not appear to have been numbered. By the time of the first architectural inventory in the mid-1980s (Berger 1986), the numbering sequence had changed and numbers were applied to the pits rather than to the data booths, which do not even appear on inventory maps. It is unclear whether these changes were intentional or resulted from misinterpretation and misreading of the system that existed when Fort Slocum closed. In any case, with these changes, Battery Haskin Pit B became Building 126, and the associated fire control building was unnumbered, or perhaps was implicitly regarded as part of the same structure. During the architectural reconnaissance conducted by the Public Archaeology Laboratory, Inc., and Tetra Tech in November 2004, the fire control building associated with Battery Haskin Pit B was recorded as Building 127B (Olausen et al. 2005).

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Aerial Photographs

(Except as noted, all photographs are on file at National Archives, College Park, Maryland. Digital copies examined for this research come from the Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.)

ca. 1922: Low angle oblique aerial photograph of Davids Island. View northeast. Winter.

1923: Vertical aerial photograph of Davids Island. November 20.

1924: Vertical aerial photograph of Davids Island. August 24.

1924: High angle oblique aerial photograph of Davids Island showing all but southeastern tip, with north shore of Long Island Sound east of New Rochelle visible in background. View northeast. August 24.

1932: Low angle oblique aerial photograph of Davids Island. View north. January 11.

1936: High angle oblique aerial photograph of Davids Island. View south. January 17.

ca. 1938: Real-photo postcard showing low-angle oblique aerial photograph of Davids Island. Summer. View north. In collection of Michael A. Cavanaugh, Los Angeles. Also published in *New York City's Harbor Defenses* (2003), p. 92, by Leo Polaski and Glen Williford, Arcadia Publishing, Charleston, South Carolina.

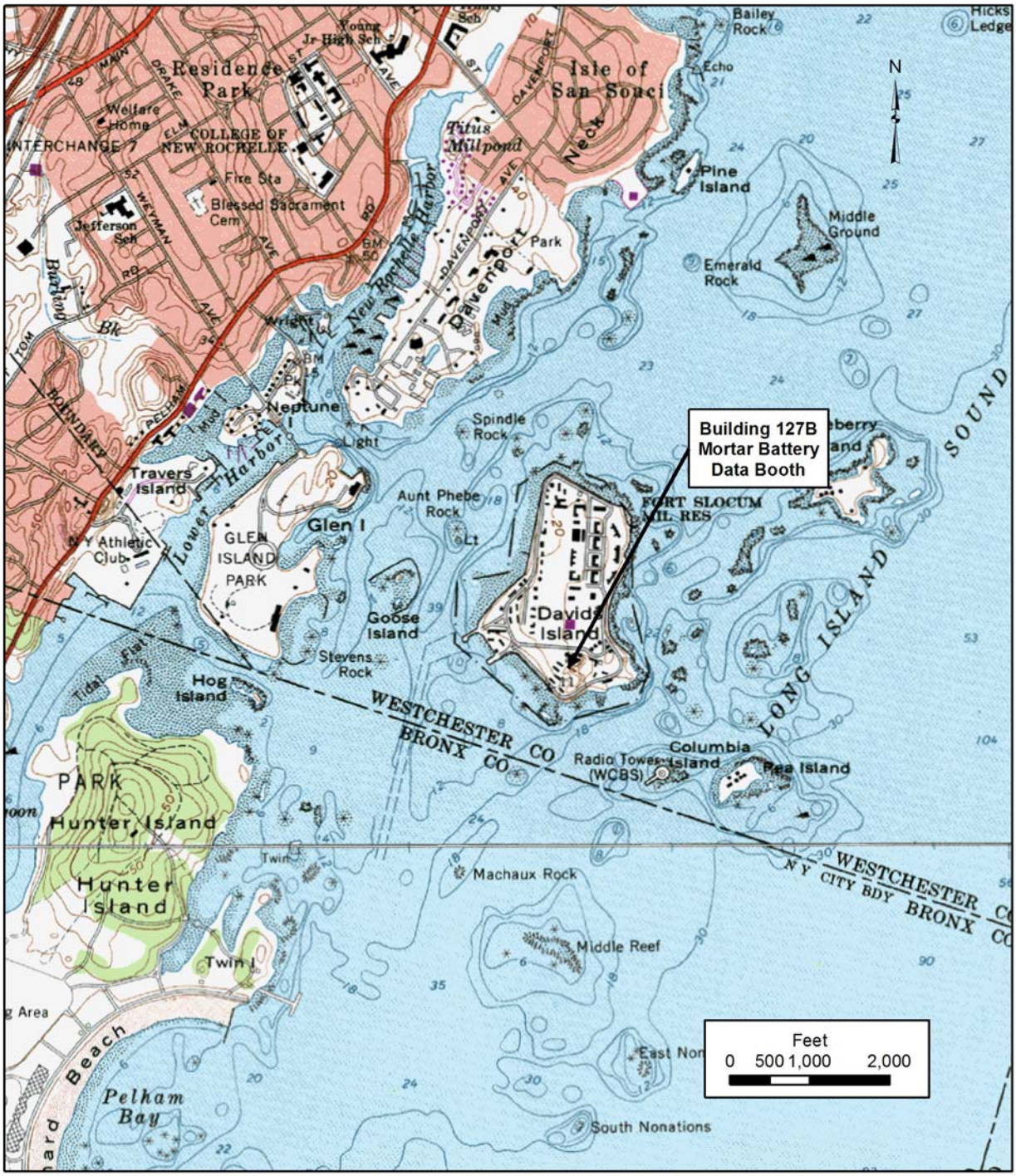
1940: Vertical aerial photograph of Davids Island. September 4.

ca. 1942: High angle oblique aerial photograph of Davids Island, Columbia Island, and Huckleberry Island. View northeast. U.S. Air Force Historical Research Agency, Maxwell Air Force Base. Digital copy in the Fort Slocum Alumni and Friends Collection.

ca. 1958: High angle oblique aerial photograph of Davids Island. View north. Summer. Included in a 1966 report prepared by Cross & Brown Co., New York, for the Federal Property Resources Service, on file at the New York City branch of the National Archives, Record Group 291.

1961: High angle oblique aerial photograph of Davids Island. View north. November 15. Attributed to Capt. Donald P. Blake.

LOCATION MAP (USGS Mount Vernon, NY)
Scale: 1:24,000
1966 (Photorevised 1979)



SITE MAP

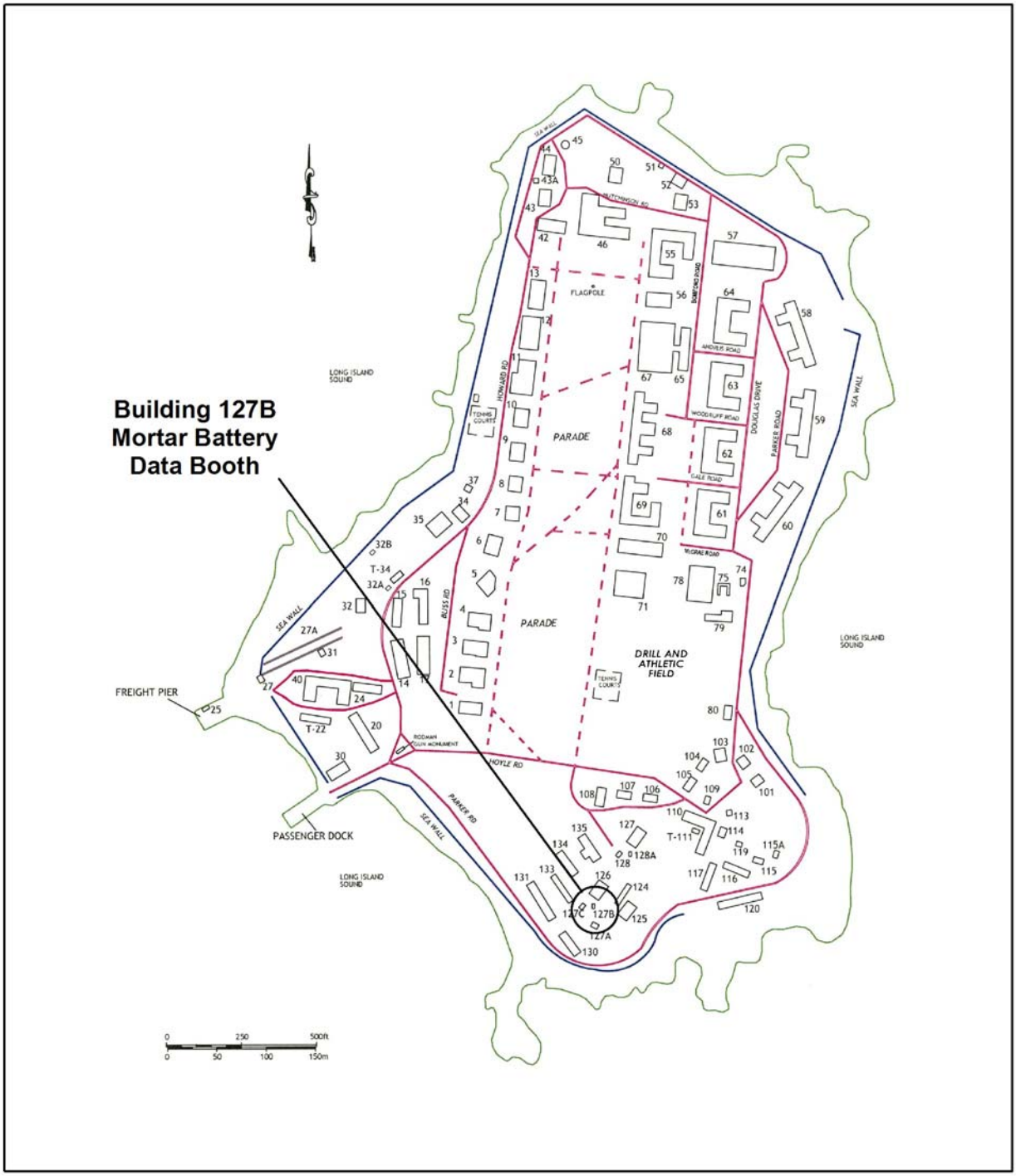

Building 127B
Mortar Battery
Data Booth
PARADE
PARADE
DRILL AND
ATHLETIC
FIELD
FLAGPOLE
TENNIS COURTS
TENNIS COURTS
FREIGHT PIER
PASSENGER DOCK
LONG ISLAND SOUND
LONG ISLAND SOUND
LONG ISLAND SOUND
SEA WALL
SEA WALL
SEA WALL
HOWARD RD
BUSS RD
HOYLE RD
PARKER RD
DOUGLAS DRIVE
PARKER ROAD
BAMFORD ROAD
ANDRUS ROAD
WOODRUFF ROAD
GALE ROAD
McGRAE ROAD
HUTCHINSON RD
ROMAN CATHOLIC MONUMENT
T-34
T-22
T-111
127A
127B
127C
128
128A
0 250 500ft
0 50 100 150m

Figure 1. Vertical aerial photograph, November 20, 1923, detail. Fort Slocum's Mortar Battery with adjoining permanent and temporary buildings. North is to the top of the page. Building 127B is indicated by yellow ellipse. Original in National Archives, College Park, MD; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.

Figure 2. High angle oblique aerial photograph of Davids Island, detail. View north. November 15, 1961. Attributed to Capt. Donald P. Blake. Building numbers have been added to identify elements of the Mortar Battery. Building 127B is at left of image. Original in National Archives, College Park, MD; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.

HISTORICAL DOCUMENTATION

INDEX TO PHOTOGRAPHS

FIRE CONTROL BUILDING, BATTERY HASKIN PIT B (BUILDING 127B)
Davids Island—Fort Slocum
New Rochelle
Westchester County
New York

Photographers: Matt Kierstead, PAL Inc., Pawtucket, RI, November 2005 (Photo 1) and November 2004 (Photo 2).

Thomas A. Henry, Tetra Tech EC, Inc., Langhorne, PA, April 2007 (Photos 3-4).

1. Western and southern façades, facing northeast.
2. Southern façade, facing northwest.
3. Northern and eastern façades as viewed from floor of mortar pit, facing southwest.
4. Interior: crude shelving against eastern wall, facing east.

Photo 1. Western and southern façades, facing northeast.

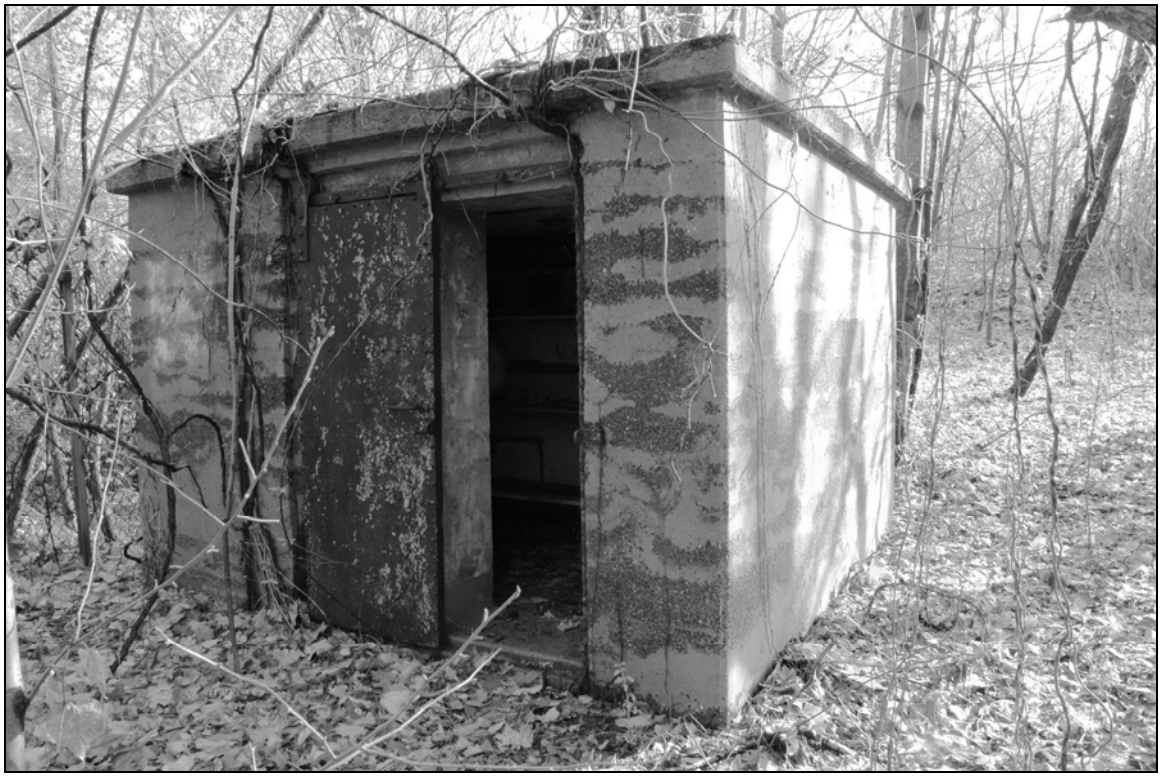


Photo 2. Southern façade, facing northwest.

Photo 3. Northern and eastern façades as viewed from floor of mortar pit, facing southwest.

Photo 4. Interior: crude shelving against eastern wall, facing east.

DAVIDS ISLAND – FORT SLOCUM HISTORICAL DOCUMENTATION

TRANSFORMER VAULT No. 9 (BUILDING 127C)

Location:	Davids Island–Fort Slocum 0.6 mi southeast of New Rochelle, New York mainland USGS Mount Vernon, NY Quadrangle UTM Coordinate (NAD 1983): 18.603608.4526258
Present Owner(s):	City of New Rochelle, NY
Date of Construction:	ca. 1955
Architect/Engineer:	U.S. Army Corps of Engineers
Present Use:	Abandoned when documented (2004-2007). Demolished 2007
Significance:	The Transformer Vault No. 9 (Building 127C) is situated in the Defense and Support Area, where it provided electrical power for the command and control facilities of Fort Slocum's Nike missile battery (active 1955-1960). It is associated with facilities installed at Fort Slocum during the early period of the Cold War (1947-1963) that contributed to the antiaircraft defense of New York City. The structure is an element in the Fort Slocum Historic and Archeological District.
Project Information:	The U.S. Army Corps of Engineers, New York District (Corps), has been authorized under the Department of Defense Appropriations Act, 2004, to perform building demolition, debris removal, and remediation of asbestos materials (Project) at the Fort Slocum on Davids Island in the City of New Rochelle, New York. The purpose of the Project is to remove buildings and infrastructure from the abandoned fort installation that create safety hazards as part of a long-range plan to restore Davids Island for future use. In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800), the Corps has consulted with the New York State Historic Preservation Officer (NYSHPO) regarding the effects of the Project on historic properties. The consultation resulted in the development of a Memorandum of Agreement (MOA) among the Corps, NYSHPO, County of Westchester, and City of New Rochelle as consulting parties. This documentation report was prepared in accordance with Stipulation II.C.1 of the MOA.
Prepared by:	C.L. Borstel, J.C. Sexton, R.M. Jacoby, S.B. Marshall, and C.W. Christopher
Title:	Cultural Resources Documentation Team
Affiliation:	Tetra Tech EC, Inc., Morris Plains, NJ
Date:	March 2007 (Revision 1, January 2010)

PART I. DESCRIPTION

Transformer Vault No. 9 (Building127C) is located in the southeastern quadrant of Davids Island. The island is in the western portion of Long Island Sound, 0.6 miles southeast of the New Rochelle, NY, mainland, and 19 miles northeast of Midtown Manhattan (Location Map and Site Map). Davids Island is a roughly pear-shaped, relatively flat landmass consisting of approximately 78 acres above mean high water. It is heavily wooded and contains the ruins of more than 100 buildings and structures associated with the now-abandoned U.S. Army post, Fort Slocum. The ruins include barracks and quarters; quartermaster, administrative, medical, and recreation buildings; and coastal and air defense facilities. A concrete and stone seawall encircles most of the shore, and a system of roads and paths runs throughout the island. Building 127C is located in the central portion of the Defense and Support Area. This section of Fort Slocum is a functionally-mixed area that adjoins and includes the 1891-1897 coastal artillery Mortar Battery.

Building 127C is one of two open-air transformer vaults at Fort Slocum. The structure is an unroofed, fenced enclosure with a concrete slab floor. The vault is situated inside the fenced compound for Fort Slocum's Nike antiaircraft missile battery, and stands approximately 75 feet northwest of the Nike Generator Building (Building 127A). It is situated at the western edge of the late nineteenth-century coastal artillery Mortar Battery (Battery Haskin-Overton, Buildings 125-127), 10 to 20 feet east of the WAC Barracks access road (Figures 1-2).

Building 127C is oriented northeast-southwest. The vault floor measures approximately 12 by 24 feet and is enclosed by a fence approximately 6 feet high. The enclosure is a mix of steel chain link fence supported by cylindrical steel posts (on the north half) and heavy-duty woven-wire fence on steel U-channel posts (on the south half). This mix of materials may be a later alteration to the enclosure. An entrance, consisting of a frame of cylindrical steel pipe covered by chain link fence and carried by bolt-on hinges, is situated at the northeastern corner of the enclosure. There is also a gap in the enclosure fence on the northwestern side, but this opening is probably a result of vandalism or deterioration. Unlike Fort Slocum's other open-air transformer vault—Building 32A—the enclosure fence for Building 127C is not topped by barbed wire, though the nearby perimeter fence of the missile battery is so protected (Photos 1-5).

The enclosure's interior contains disordered remnants of the vault's electrical components. Among the remnants are two dismounted empty cylindrical transformer tanks lying on the ground, cable channels that have been cut off above ground level, and a fuse box and switch rack, which has pulled off a sheet of plywood mounted on steel fence posts standing against the perimeter fence. A large knife switch with an associated constant voltage transformer occupies a small open shelter of sheet metal mounted on a pair of fence posts just outside the southeastern side of the enclosure.

Building 127C appears to have vandalized and is in poor condition. It is overgrown and covered by a deep mat of leaf litter.

PART II. HISTORICAL NARRATIVE

Fort Slocum

Davids Island is named for Thaddeus Davids (1816-1894), a New Rochelle ink manufacturer, who owned the island between 1856 and 1867. Davids was next-to-last in a line of private owners and lessees associated with the island between circa 1700 and the 1860s. During this period, the island was used primarily as farmland,

but beginning probably in the 1840s, it also became a destination for excursionists who traveled by steamboat from New York and Brooklyn to picnic by the sea. The U.S. Army leased the island in 1862 and purchased it outright in 1867. In 1967, the federal government sold Davids Island to the City of New Rochelle, which sold it in turn the following year to Consolidated Edison Company of New York, Inc. Consolidated Edison returned ownership of most of the island to the city in 1976.

Two U.S. Army posts successively occupied Davids Island between 1862 and 1965. The earlier post was established as De Camp General Hospital in May 1862. The hospital treated wounded Union soldiers and, from 1863 onwards, also cared for Confederate prisoners of war. After the Civil War, the Army remained on the island, apparently using the post somewhat discontinuously as a hospital, mustering-out camp, and subdepot for recruits. By the early 1870s, the hastily-built wood frame buildings of the Civil War had deteriorated badly, and in October 1874 the Army entirely withdrew from the island, beginning a hiatus in occupation of nearly four years.

The Army returned in July 1878, when Davids Island was designated as a principal depot of the General Recruiting Service, supplanting Governors Island off lower Manhattan in that role. Originally known simply as Davids Island, the Army formally named the post Fort Slocum in 1896 to honor Maj. Gen. Henry Warner Slocum (1827-1894), a prominent Union soldier and New York politician. Recruit intake and training was a primary function of the post well into the twentieth century. Fort Slocum also saw service as an overseas embarkation station; hosted Army specialty schools for bakers, transportation officers, chaplains, public affairs personnel, and military police; provided retraining for court-martialed soldiers; and was an administrative center for the Air Force. Coastal artillery batteries operated at the post around the beginning of the twentieth century. During the Cold War, Fort Slocum supported an air defense missile battery.

When the post closed in 1965, Fort Slocum's landscape integrated elements from different episodes of development into a campus-like whole. Several episodes of development were represented, particularly 1885-1910 and 1929-1940. A few wood frame buildings remained from the late 1870s and early 1880s, and at least nine such buildings represented the Second World War. However, of the more than 50 temporary wood frame buildings erected during the First World War, only a single, partial example survived. Most of the buildings at Fort Slocum followed standard Army plans, but Army personnel or outside professional architects also produced a few designs specifically for the post. The permanent buildings at Fort Slocum generally reflected conservative and eclectic interpretations of different currents in American architecture, producing an engaging mix of Colonial Revival, Neoclassical, Romanesque, and Italianate styles. The temporary buildings around the post were in contrast unadorned and starkly utilitarian, as they were designed principally for speed of construction.

The period after Fort Slocum closed in November 1965 saw severe deterioration of the former Army post. The City of New Rochelle repeatedly sought to redevelop Davids Island, at one time considering a Consolidated Edison proposal to build a nuclear power plant and later supporting proposals for luxury residences. None of these plans materialized. Neglect and vandalism took a heavy toll on the former post. By the first decade of the twenty-first century, the landscape was overgrown, and the more than 100 buildings and structures that once comprised Fort Slocum were in decay and ruin.

Detailed accounts of Fort Slocum's history can be found in the general historic overview to this documentation series (Tetra Tech 2008) and in Olausen et al. (2005), among other sources.

Transformer Vault No. 9 (Building 127C)

Building 127C is one of ten numbered and inventoried buildings and structures or structure-components in the central part of Fort Slocum's Defense and Support Area. This functional area occupies the southeastern quadrant of Davids Island. The area contains a large earth and concrete fortification, Battery Haskin-Overton (Buildings 125-127), which was constructed in the last decade of the nineteenth century as an emplacement for 16 heavy mortars designed to be used against ships. The Mortar Battery was deactivated in 1906, and the mortars themselves were removed in 1920. Thereafter, the fortification was modified several times. Among other alterations, its contours were reshaped when it was incorporated into the post's small golf course in the mid-1920s, and the northeastern quadrant was demolished in the early 1940s for construction of a small-arms firing range.

In the mid-1950s, the southwestern quadrant of the Mortar Battery and an adjacent area to the west became the Integrated Fire-Control (IFC) Area of a Nike antiaircraft missile battery, designated as Battery NY-15 (active 1955-1961). Battery NY-15 was part of a ring of such batteries erected around New York City to protect it from Soviet bombers. The IFC Area was responsible for target acquisition and missile guidance, as well as for the general administration of battery's personnel and operations. Its complementary section, the Launch Area, which contained the missiles, magazines, launchers, and related facilities, was situated on Hart Island, 1.5 miles to the southwest. (The Mortar Battery and associated elements are documented elsewhere in Volume 5 of *Documentation of Contributing Elements, Fort Slocum Historic and Archeological District, Davids Island, City of New Rochelle, New York*; additional comments on the Nike missile battery appear in the documentation for Building 124, also in Volume 5.)

Building 127C, Fort Slocum's Transformer Vault No. 9, was a small but essential part of the IFC Area. It stepped down the voltage of the post's main electrical service circuit for the use of the IFC Area. When operating on alert under immediate-threat conditions, however, diesel generators in the Nike Generator Building (127C) supplied power to the battery-control elements of the IFC Area (Carlson and Lyon 1996:59; Cavanaugh 2007; Engineer Intelligence Division 1961; Lowery 2007).

The electricity supplied in the post's main electrical service circuit was provided commercially by the local electrical utility. It was delivered to the post's local substation at Building 37 by a pair of submarine electrical cables originating on the New Rochelle shoreline at Neptune Dock. The local service circuit was primarily carried by a three-cycle 4,160-volt cable in a 4-inch underground conduit laid in a loop running out from Building 37. Although electricity was introduced into general use at Fort Slocum in 1903 (Historical Perspectives 1985:42), the underground distribution system dated to about the time of the Second World War. Before then, historical photographs, including aerial photographs, indicate that power was distributed around the post by wires on poles. As indicated by historical photographs, sometime after September 1940, the above-ground power distribution system was entirely relocated underground.

As it existed between the 1940s and the 1960s, the post's main electrical service circuit supplied twelve vaults dispersed around Davids Island, most of which were located on the main service loop. Transformer Vault No. 9 at Building 127C was supplied by a branch off the main loop originating at Manhole No. 6, situated in the southern end of the Parade Ground. Most of the transformer vaults were situated in rooms in the basements of various buildings at the post, but two, the one at Building 127C and another at Building 32A , were open-air vaults. In addition, at least one vault occupied a small, separate, fully-enclosed structure (Building 109), and it is possible that one other vault similarly occupied a small functionally-specialized building (Building 27) (Office of the Post Engineer 1949-1957).

No historical sources obtained during research for this documentation supplied an exact date for the construction of Building 127C. It appears on a map of the electrical distribution system at Fort Slocum drawn in 1949 and revised through November 1957 (Office of the Post Engineer 1949-1957), but, as only a copy of the map is available for examination, it is impossible to determine whether the symbol representing the structure was on the original drawing or whether it was a later revision. Its designation as Vault No. 9 falls at the end of the number sequence for these structures, which runs from 1 to 9, but also includes the designations NE 1A, 7A, and NE 8A. Geographically, the designation of Vault No. 9 is out of place, as the number sequence for the post's electrical vaults generally runs in a counterclockwise direction from Building 37, and its nearest neighbors are Vaults Nos. 2 (in Building 17) and 3 (in Building 109). Manhole No. 21, on the branch distribution line between Manhole No. 6 and Vault No. 9, is likewise the highest sequential number in its series and is geographically out of place. These considerations suggest that Vault No. 9 was added to the service circuit later, but provide no indication as to whether the addition dates from the mid-1940s or the mid-1950s. Slightly more persuasive is its location within the fenced Nike IFC Area compound. Admittedly, this evidence, too, is circumstantial, but it is sufficient in absence of any contradictory information to lead this documentation to estimate the date of construction as ca. 1955.

Building 127C was designated as Building 129 in Fort Slocum's building numbering system of 1957 (Office of the Post Engineer 1949-1957). It was not included in the 1986 historic architectural survey of Fort Slocum (Berger 1986), and its 1957 designation appears to have been overlooked during 2004 inventory (Olausen et al. 2005), where it is referred to as the "Nike Electrical Substation," an technically imprecise description. That inventory identified the structure as Building 127C, the designation used here.

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Maps and Drawings

May 1949, revised through November 1957 "Fort Slocum, New Rochelle, N.Y., Electric Distribution System Primary Lines." Office of Post Engineer, Fort Slocum. On file at Tetra Tech EC, Inc., Morris Plains, NJ, from materials supplied by Consolidated Edison Company of New York, Inc.

December 1961 "Map of Fort Slocum (Davids Island), New Rochelle, N.Y." Prepared under the direction of the First Army Engineer by the Engineer Intelligence Division, Governors Island, New York. Record Group 92, National Archives, College Park, MD.

Aerial Photographs

(Except as noted, all photographs are on file at National Archives, College Park, Maryland. Digital copies examined for this research come from the Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.)

1932: Low angle oblique aerial photograph of Davids Island. View north. January 11.

1940: Vertical aerial photograph of Davids Island. September 4.

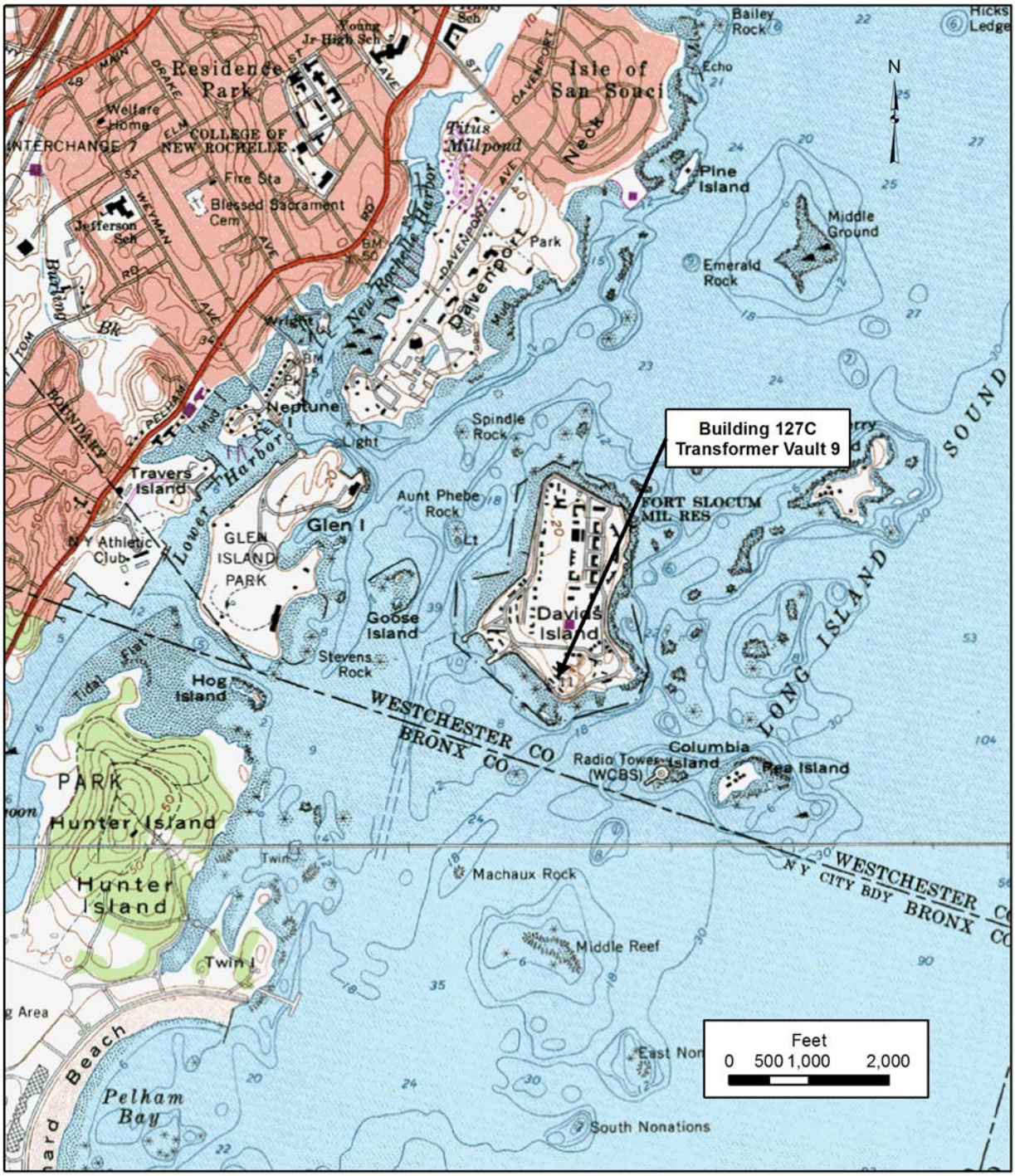
1954: Vertical aerial photograph of Davids Island, New Rochelle, NY. Date and originating agency unknown. Available online in a georeferenced photo mosaic version through HistoricAerials.com at http://www.historicaerials.com. Accessed November 23, 2009.

ca. 1958: High angle oblique aerial photograph of Davids Island. View north. Summer. Included in a 1966 report prepared by Cross & Brown Co., New York, for the Federal Property Resources Service, on file at the New York City branch of the National Archives, Record Group 291.

1961: High angle oblique aerial photograph of Davids Island. View north. November 15. Attributed to Capt. Donald P. Blake. In the Fort Slocum Alumni and Friends Collection.

TRANSFORMER VAULT No. 9 (BUILDING 127C)
DAVIDS ISLAND-FORT SLOCUM
(Page 7)

LOCATION MAP (USGS Mount Vernon, NY)
Scale: 1:24,000
1966 (Photorevised 1979)



SITE MAP

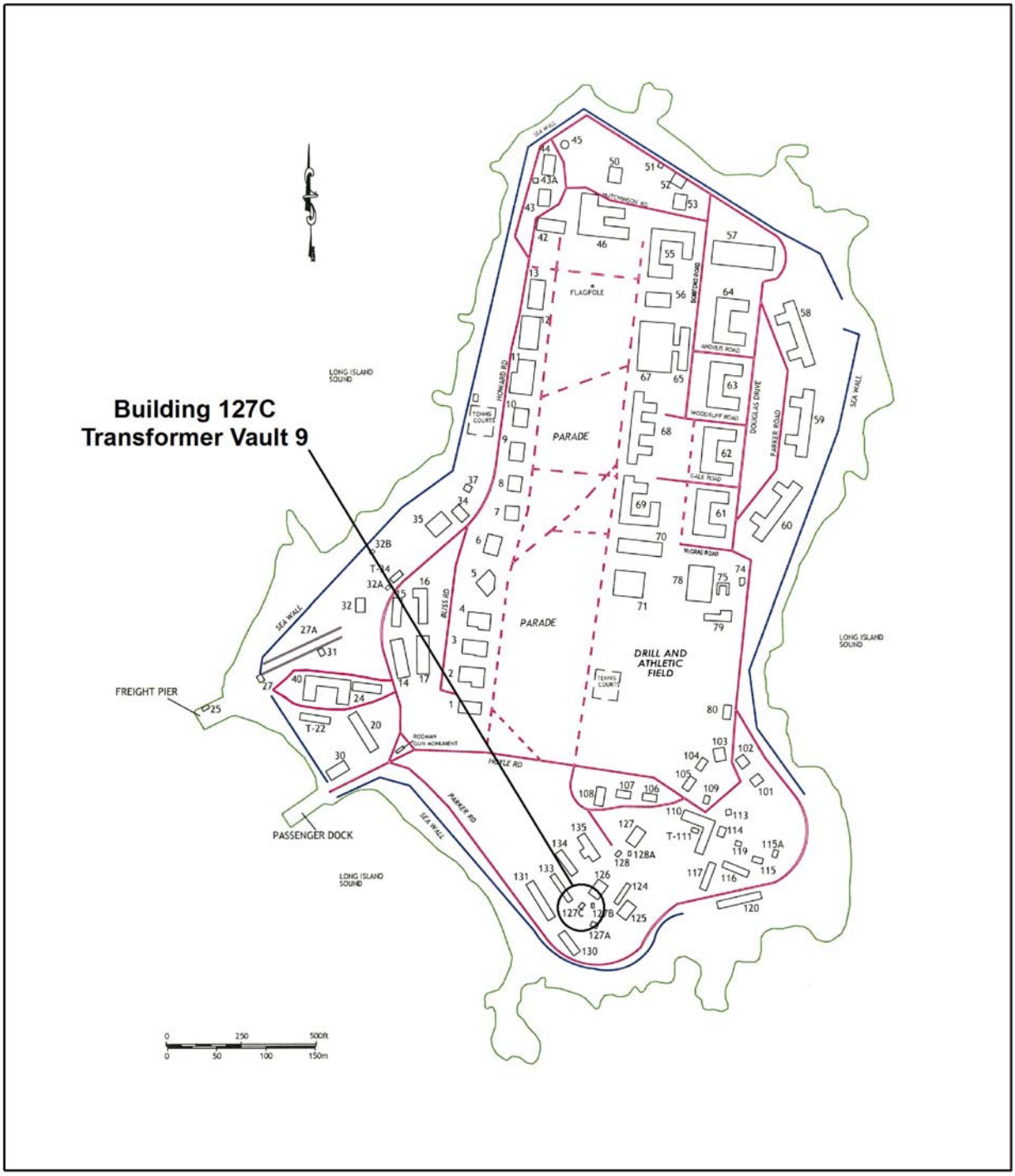

Building 127C
Transformer Vault 9
PARADE
PARADE
DRILL AND ATHLETIC FIELD
FLAGPOLE
TENNIS COURTS
TENNIS COURTS
ROMAN COIN MONUMENT
FREIGHT PIER
PASSENGER DOCK
LONG ISLAND SOUND
LONG ISLAND SOUND
LONG ISLAND SOUND
SEA WALL
SEA WALL
SEA WALL
HOWARD RD
BLISS RD
HOYLE RD
PARKER RD
DOUGLAS DRIVE
PARKER ROAD
ANDOVER ROAD
GALE ROAD
WOODRUFF ROAD
McGRAE ROAD
T-22
T-111
T-24
0 250 500ft
0 50 100 150m

Figure 1. "Fort Slocum, New Rochelle, N.Y., Electric Distribution System Primary Lines." May 1949, revised through November 1957, detail. North is to the top of the page. Transformer Vault No. 9, below and left of center, is delineated as "TV No.9"and includes a hand-written annotation designating it as Building "129." Neighboring manholes ("M" in a circle) and vaults ("V" in a rectangle) are also included in this detail from the full map. Office of Post Engineer, Fort Slocum. On file at Tetra Tech EC, Inc., Morris Plains, NJ, from materials supplied by Consolidated Edison Company of New York, Inc.

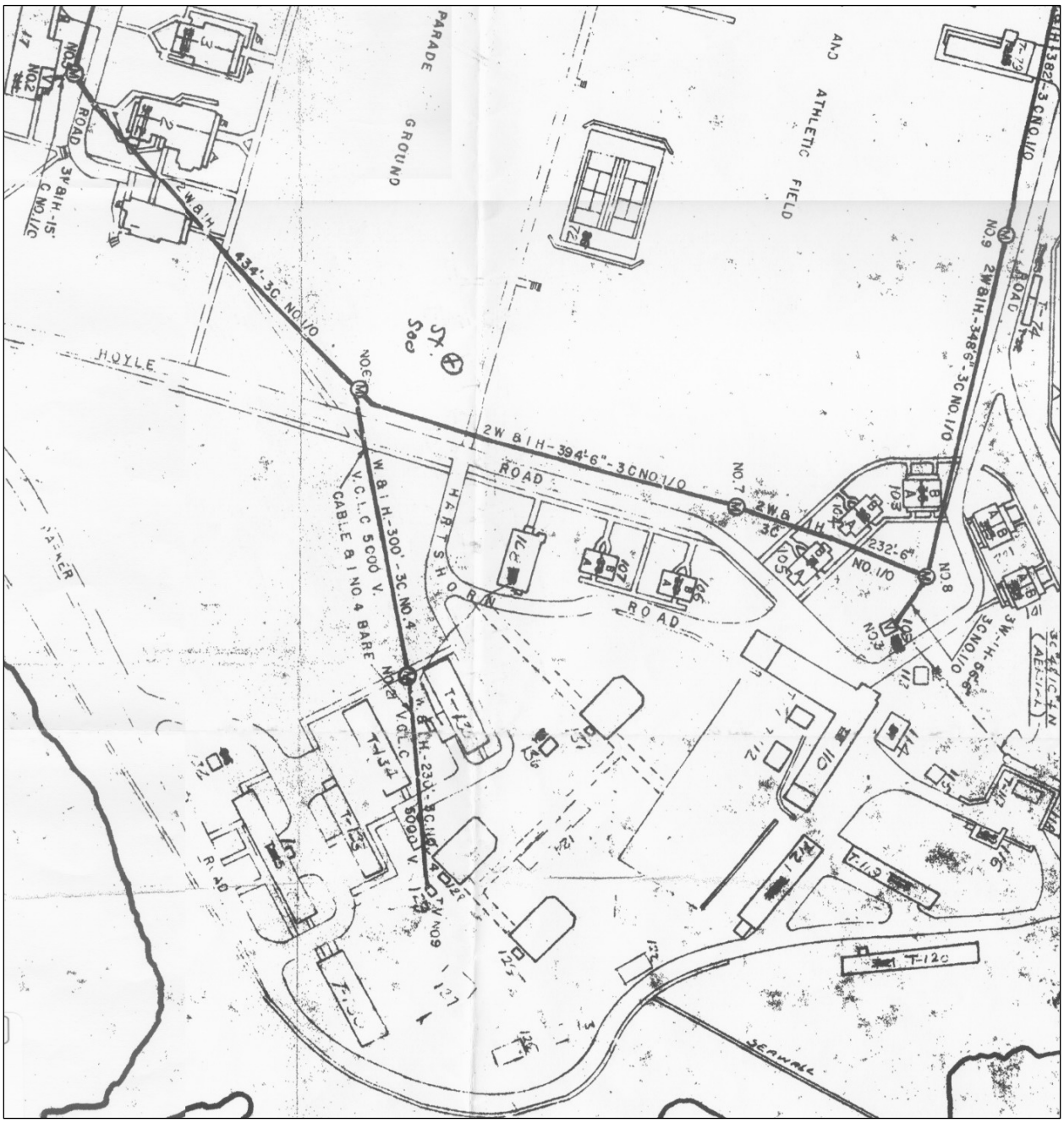


Figure 2. High angle oblique aerial photograph of Davids Island, ca. 1958, detail. View north. Labels have been added to this version of the image to indicate buildings and structures included in the Nike Battery NY-15 IFC Area. The battery's three radar sets are visible in this image and are labeled as follows: MTR—missile tracking radar; ACK—target acquisition radar; and TTR—target tracking radar. Building 127C is at center left. Original from Record Group 291, National Archives, New York, NY; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.

HISTORICAL DOCUMENTATION

INDEX TO PHOTOGRAPHS

TRANSFORMER VAULT No. 9 (BUILDING 127C)
Davids Island—Fort Slocum
New Rochelle
Westchester County
New York

Photographers: Matt Kierstead, PAL Inc., Pawtucket, RI, November 2004 (Photo 1).

Nancy Brighton, USACE, New York, NY, March 2006 (Photo 2).

Kendall Walker, Tetra Tech EC, Inc., Boston, MA, April 2007 (Photos 3-5).

1. Northeastern side of transformer vault enclosure, facing southwest.
2. Gate in northeastern corner of transformer vault enclosure, facing southwest.
3. Northwestern side of transformer vault enclosure, facing south.
4. Southeastern side of transformer vault enclosure, with Building 134 in background, facing northwest.
5. Interior of transformer enclosure, facing northeast.

Photo 1. Northeastern side of transformer vault enclosure, facing southwest.

Photo 2. Gate in northeastern corner of transformer vault enclosure, facing southwest.

Photo 3. Northwestern side of transformer vault enclosure, facing south.

Photo 4. Southeastern side of transformer vault enclosure, with Building 134 in background, facing northwest.

Photo 5. Interior of transformer enclosure, facing northeast.

DAVIDS ISLAND – FORT SLOCUM HISTORICAL DOCUMENTATION

MORTAR BATTERY POWERHOUSE (BUILDING 128)

Location:	Davids Island–Fort Slocum 0.6 mi southeast of New Rochelle, New York mainland USGS Mount Vernon, NY Quadrangle UTM Coordinate (NAD 1983): 18.603642.4526303
Present Owner(s):	City of New Rochelle, NY
Date of Construction:	circa 1897
Architect/Engineer:	U.S. Army Corps of Engineers
Present Use:	Abandoned when documented (2004-2007). Demolished 2007
Significance:	The Mortar Battery Powerhouse (Building 128) is a component of Fort Slocum's Mortar Battery. It is situated in the post's Defense and Support Area. The powerhouse provided electrical power to the coastal mortar battery in support of Fort Slocum's role in early twentieth-century coastal defense. The building is a contributing element to the Fort Slocum Historic and Archeological District.
Project Information:	The U.S. Army Corps of Engineers, New York District (Corps), has been authorized under the Department of Defense Appropriations Act, 2004, to perform building demolition, debris removal, and remediation of asbestos materials (Project) at the Fort Slocum on Davids Island in the City of New Rochelle, New York. The purpose of the Project is to remove buildings and infrastructure from the abandoned fort installation that create safety hazards as part of a long-range plan to restore Davids Island for future use. In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800), the Corps has consulted with the New York State Historic Preservation Officer (NYSHPO) regarding the effects of the Project on historic properties. The consultation resulted in the development of a Memorandum of Agreement (MOA) among the Corps, NYSHPO, County of Westchester, and City of New Rochelle as consulting parties. This documentation report was prepared in accordance with Stipulation II.C.1 of the MOA.
Prepared by:	Christopher L. Borstel, Ph.D.
Title:	Cultural Resources Specialist
Affiliation:	Tetra Tech EC, Inc., Morris Plains, NJ
Date:	July 2007 (Revision 1, January 2010)

PART I. DESCRIPTION

The Mortar Battery Powerhouse (Building 128) is located in the southeastern quadrant of Davids Island. The island is in the western portion of Long Island Sound, 0.6 miles southeast of the New Rochelle, NY, mainland, and 19 miles northeast of Midtown Manhattan (Location Map and Site Map). Davids Island is a roughly pear-shaped, relatively flat landmass consisting of approximately 78 acres above mean high water. It is heavily wooded and contains the ruins of more than 100 buildings and structures associated with the now-abandoned U.S. Army post, Fort Slocum. The ruins include barracks and quarters; quartermaster, administrative, medical, and recreation buildings; and coastal and air defense facilities. A concrete and stone seawall encircles most of the shore, and a system of roads and paths runs throughout the island. The powerhouse is an element of Fort Slocum's Battery Haskin-Overton (Buildings 125-127) and is situated within its footprint. The Mortar Battery is a concrete and earth fortification that dominates the terrain of the southeastern end of Davids Island and occupies the central portion of the Defense and Support Area. This area is a functionally-mixed section of Fort Slocum that, in addition to fortifications and defensive structures, also includes utility and support-services buildings, women's barracks, and other types of structures.

Building 128 is a one-story utilitarian brick building situated approximately 40 feet southwest of the Battery Overton entrance ramp. The building has a rectangular plan, with its long axis parallel to that of the Mortar Battery—i.e., oriented roughly northeast-southwest. It measures about 18 feet-4 inches by 29 feet-0 inches and is notable for its thick concrete roof. The roof is flat and is estimated to be 3 feet thick, including supporting steel girders embedded in the base of the roof. (The roof system only became fully evident upon demolition of the building in June 2007). A low mound of earth covers the roof. The building has brick bearing walls and a concrete slab-on-grade foundation (Figures 1-5; Photos 1-6).

The main façade faces northwest by west (i.e., about 303°), which is here referred to as the western side of the building. This façade features a wide central doorway symmetrically flanked by a pair of windows. The doorway has a flat, gray limestone lintel and is wide enough that it may have had a double-leaf door, but this element is no longer extant. The rectangular window openings have flat lintels and sills also of gray limestone. The openings are covered by iron bars. Remnants of the building's windows are double-hung wood sash, with indeterminate glazing covered by steel mesh. The brickwork is laid in common bond with sixth-course headers. On this façade, the brickwork continues above the bearing wall as a facing for the concrete roof slab. The top of the wall, at the top surface of the roof, has a coping of thin gray limestone slabs. Except for triangular patches at the corners, the brickwork on this side of the building is coated with a thin, flaking layer of white pigment. The pigment is apparently a remnant paint layer, and, based on examination of historic oblique aerial photographs, the triangular patches, which extend diagonally from upper corners at the coping past the outside corners of the sills to the ground, were once hidden by mounds of earth. The façade is otherwise plain.

The other façades are all plain and lack window or door openings. However, a small cylindrical vent pierces the northern wall near its upper front corner. The brick walls rise to the base of the roof slab, which is contiguous with the exterior wall surfaces. The entire northern wall of the building and most of its southerly counterpart are exposed, but much of the eastern (rear) wall is below the present grade and is hidden by earth. Like the front wall, the side and rear walls are laid in common bond with sixth-course headers. The exposed brickwork is covered by a deteriorating layer of cement or mortar pargeting and has a few scattered patches of efflorescence.

The interior of the powerhouse is divided into two rooms separated by a brick wall with an opening sized for a single-leaf door. The door is not extant, though its wood casing remains. The wall is located just south of the outside entrance and extends across the width of the building, creating a smaller room (about 9 by 16 feet) to the south and a larger room (about 16 by 17 feet) to the north. The undersurfaces of the steel I-beams in the roof are exposed, and water seeping through microscopic cracks in the roof has caused efflorescence and small stalactites on the ceilings of the rooms. The walls and floor of the interior are plain and finished simply. Leaves, bits of masonry, and other debris litter the floor.

PART II. HISTORICAL NARRATIVE

Fort Slocum

Davids Island is named for Thaddeus Davids (1816-1894), a New Rochelle ink manufacturer, who owned the island between 1856 and 1867. Davids was next-to-last in a line of private owners and lessees associated with the island between circa 1700 and the 1860s. During this period, the island was used primarily as farmland, but beginning probably in the 1840s, it also became a destination for excursionists who traveled by steamboat from New York and Brooklyn to picnic by the sea. The U.S. Army leased the island in 1862 and purchased it outright in 1867. In 1967, the federal government sold Davids Island to the City of New Rochelle, which sold it in turn the following year to Consolidated Edison Company of New York, Inc. Consolidated Edison returned ownership of most of the island to the city in 1976.

Two U.S. Army posts successively occupied Davids Island between 1862 and 1965. The earlier post was established as De Camp General Hospital in May 1862. The hospital treated wounded Union soldiers and, from 1863 onwards, also cared for Confederate prisoners of war. After the Civil War, the Army remained on the island, apparently using the post somewhat discontinuously as a hospital, mustering-out camp, and subdepot for recruits. By the early 1870s, the hastily-built wood frame buildings of the Civil War had deteriorated badly, and in October 1874 the Army entirely withdrew from the island, beginning a hiatus in occupation of nearly four years.

The Army returned in July 1878, when Davids Island was designated as a principal depot of the General Recruiting Service, supplanting Governors Island off lower Manhattan in that role. Originally known simply as Davids Island, the Army formally named the post Fort Slocum in 1896 to honor Maj. Gen. Henry Warner Slocum (1827-1894), a prominent Union soldier and New York politician. Recruit intake and training was a primary function of the post well into the twentieth century. Fort Slocum also saw service as an overseas embarkation station; hosted Army specialty schools for bakers, transportation officers, chaplains, public affairs personnel, and military police; provided retraining for court-martialed soldiers; and was an administrative center for the Air Force. Coastal artillery batteries operated at the post around the beginning of the twentieth century. During the Cold War, Fort Slocum supported an air defense missile battery.

When the post closed in 1965, Fort Slocum's landscape integrated elements from different episodes of development into a campus-like whole. Several episodes of development were represented, particularly 1885-1910 and 1929-1940. A few wood frame buildings remained from the late 1870s and early 1880s, and at least nine such buildings represented the Second World War. However, of the more than 50 temporary wood frame buildings erected during the First World War, only a single, partial example survived. Most of the buildings at Fort Slocum followed standard Army plans, but Army personnel or

outside professional architects also produced a few designs specifically for the post. The permanent buildings at Fort Slocum generally reflected conservative and eclectic interpretations of different currents in American architecture, producing an engaging mix of Colonial Revival, Neoclassical, Romanesque, and Italianate styles. The temporary buildings around the post were in contrast unadorned and starkly utilitarian, as they were designed principally for speed of construction.

The period after Fort Slocum closed in November 1965 saw severe deterioration of the former Army post. The City of New Rochelle repeatedly sought to redevelop Davids Island, at one time considering a Consolidated Edison proposal to build a nuclear power plant and later supporting proposals for luxury residences. None of these plans materialized. Neglect and vandalism took a heavy toll on the former post. By the first decade of the twenty-first century, the landscape was overgrown, and the more than 100 buildings and structures that once comprised Fort Slocum were in decay and ruin.

Detailed accounts of Fort Slocum's history can be found in the general historic overview to this documentation series (Tetra Tech 2008) and in Olausen et al. (2005), among other sources.

Mortar Battery Powerhouse (Building 128)

The Mortar Battery Powerhouse (Building 128) is a component of the Endicott-era Mortar Battery, formally called Battery Haskin-Overton (Buildings 125-127). This fortification was constructed on Davids Island in the early to mid-1890s. It had sixteen 12-inch heavy mortars divided among four carefully prepared, interconnected pits and surrounded by earth and concrete parapets. Fort Slocum's Mortar Battery was operational from 1897 to 1906, and during this period it and other fortifications at the post were part of a network of coastal defenses protecting the approaches to New York Harbor. The role of mortar batteries in these defenses was to fire large, explosive projectiles at high angles so they could rain down on the lightly armored decks of enemy ships. Normally, several mortars would fire simultaneously to create a shotgun-like fall of shells, increasing the likelihood of a successful attack. Fort Slocum's mortars, among the first to come into service, had a maximum range of around 5.5 miles and fired projectiles weighing about 800 pounds. Each group of four mortars occupied a deep pit surrounded by high earth walls with concrete revetments. The Mortar Battery's large earthwork, combined with reinforced concrete construction of critical structural components and the use of subterranean connecting tunnels and storerooms, was designed to make the batteries resistant to direct-fire naval guns. The Mortar Battery and its history are described in greater detail elsewhere in Volume 5 of *Documentation of Contributing Elements, Fort Slocum Historic and Archeological District, Davids Island, City of New Rochelle, New York.*

The powerhouse was part of the original design of the Mortar Battery. A conceptual version of the structure appears in a sketch of the "proposed plant for electric lighting" prepared in January 1897 (Figures 1-2). In calling the powerhouse part of the original design of the fortification, however, it should be stressed that Fort Slocum's Mortar Battery was one of several early structures of its type, and the Army did not have a standardized design for them when it began building on Davids Island. While experimentation in the 1880s and beginning of the 1890s had validated the basic concepts incorporated into this class of fortifications, some details of the design had to be worked out as construction progressed. In addition, electricity was just coming into general use in the United States in the 1890s, and the Army was then in the early stages of adopting this new source of power for illumination and other applications (Chattey et al. 1997:185; Winslow 1920:269). Indeed, the Mortar Battery's powerhouse provided the fortification with a dedicated power source for electrical lighting six years before the electric

lights were installed elsewhere at the post. (The Army installed electric lighting in the entire post in 1903, relying on commercially-produced power delivered to Davids Island by submarine cable [Jordan 1944:6].) Even though the Mortar Battery had a dedicated power supply, it was used only for lighting and did not also run electric hoists, lifts, or similar machinery, as was typical of later fortifications (Corps of Engineers 1914-1920; Winslow 1920:290-291).

The 1897 sketch plan (Figures 1-2) for Fort Slocum's Mortar Battery illustrates a structure of 18 by 29 feet with a 3-foot-thick roof, essentially the same dimensions as Building 128. The drawing also shows the building as embedded into the fortification's traverse at about its as-built location. This is on the western side of the battery in the sector least vulnerable to enemy fire, a characteristic arrangement for fortification powerhouses of the period (Winslow 1920:274). However, unlike Building 128, the structure shown in the sketch had an offset doorway, no division into rooms, and projecting retaining walls at its sides. In Building 128 the door is centered and two windows provide light and ventilation. Also, no retaining walls are used, as the earthwork originally wrapped around the front of the building. Finally, the interior was divided into a two rooms of unequal size. The sketch plan shows the inside of the powerhouse as including an engine, dynamo, battery bank, and switchboard, all of which were standard elements for this type of plant around the beginning of the twentieth century (Winslow 1920:269-301). There is no information on the layout of the actual powerhouse, but it is known that power was supplied by a 9-horsepower Hornsby-Akroyd oil engine, which drove a 4-kilowatt General Electric generator and provided power at 110 volts (Corps of Engineers 1914-1920). Introduced commercially in 1892, the Hornsby-Akroyd engine was the first successful internal combustion engine to use heavier petroleum fuels such as kerosene. The engines were reliable and economical to operate and were widely used around the beginning of the twentieth century in lighting plants of all types; however, they were soon superseded by gasoline engines in fortifications and other applications where an instantaneous-on response was necessary, since they took time to start up (Winslow 1920:278).

The 1897 sketch plan suggests the lighting system supplied by the powerhouse provided quite modest illumination. It included 37 lamps inside the Mortar Battery tunnels, most of which were specified as 16 or 24 candlepower bulbs. The light from a 16 candlepower bulb would have been roughly equivalent to the illumination provided by a modern standard 25-watt incandescent light bulb; that from a 24 candlepower bulb would have been somewhat brighter, but less than a modern standard 40-watt bulb.

Fort Slocum's Mortar Battery and its other fortifications were deactivated and put into caretaker status in 1906, where they remained into the First World War. The Coast Artillery Corps finally abandoned the fortifications in 1920, shortly after removing the mortars and other fixed equipment, presumably including that in the powerhouse. Thereafter, Fort Slocum's officers gradually modified the Mortar Battery as they adapted and used it for new purposes. It was incorporated into a small golf course in 1926, and later, in ca. 1942, the northeastern mortar pit was demolished for construction of a small-arms firing range. In the 1950s, the Integrated Fire Control Area of a Nike antiaircraft missile battery was situated on the southwestern flank of the Mortar Battery. Aerial photographs dated to ca. 1958 and 1961 also show that the soil of the earthwork that once enclosed the powerhouse was removed in the 1950s. The purpose of this alteration is unknown, but the soil may have been taken for use as fill elsewhere on the post.

The Mortar Battery Powerhouse is first depicted on a Coast Artillery Corps map of Fort Slocum from 1908, and it also appears on later revisions of the map. Other plans of Fort Slocum from this period, however, do not show the structure and often only indicate the existence of the Mortar Battery by a blank

space. The powerhouse first appears on a general map of the post on a circa-1952 sheet prepared by the Armed Forces Information School, where it is designated as Building 131 (Armed Forces Information School 1952). It also shows on a second, roughly contemporary map, which was revised several times in the early to mid-1950s (Office of Post Engineer 1949-1957). On this map, differences in inking show the building was added to the map after the drawing was first completed in 1949. The evidence of these two maps clarifies that provided by examination of available aerial photographs and appears to indicate that soil was removed from the western flank of the Mortar Battery in the early 1950s. In the post-wide renumbering of 1957, the powerhouse became Building 136. Sometime after Fort Slocum closed in 1965, it acquired its present designation, Building 128, possibly as a result of a transcription error, and was inventoried under this number by both Berger (1986) and Olausen et al. (2005).

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Aerial Photographs

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1923: Vertical aerial photograph of Davids Island. November 20.

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1940: Vertical aerial photograph of Davids Island. September 4.

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ca. 1958: High angle oblique aerial photograph of Davids Island. View north. Summer. Included in a 1966 report prepared by Cross & Brown Co., New York, for the Federal Property Resources Service, on file at the New York City branch of the National Archives, Record Group 291.

1961: High angle oblique aerial photograph of Davids Island. View north. November 15. Attributed to Capt. Donald P. Blake.

LOCATION MAP (USGS Mount Vernon, NY)
Scale: 1:24,000
1966 (Photorevised 1979)

SITE MAP

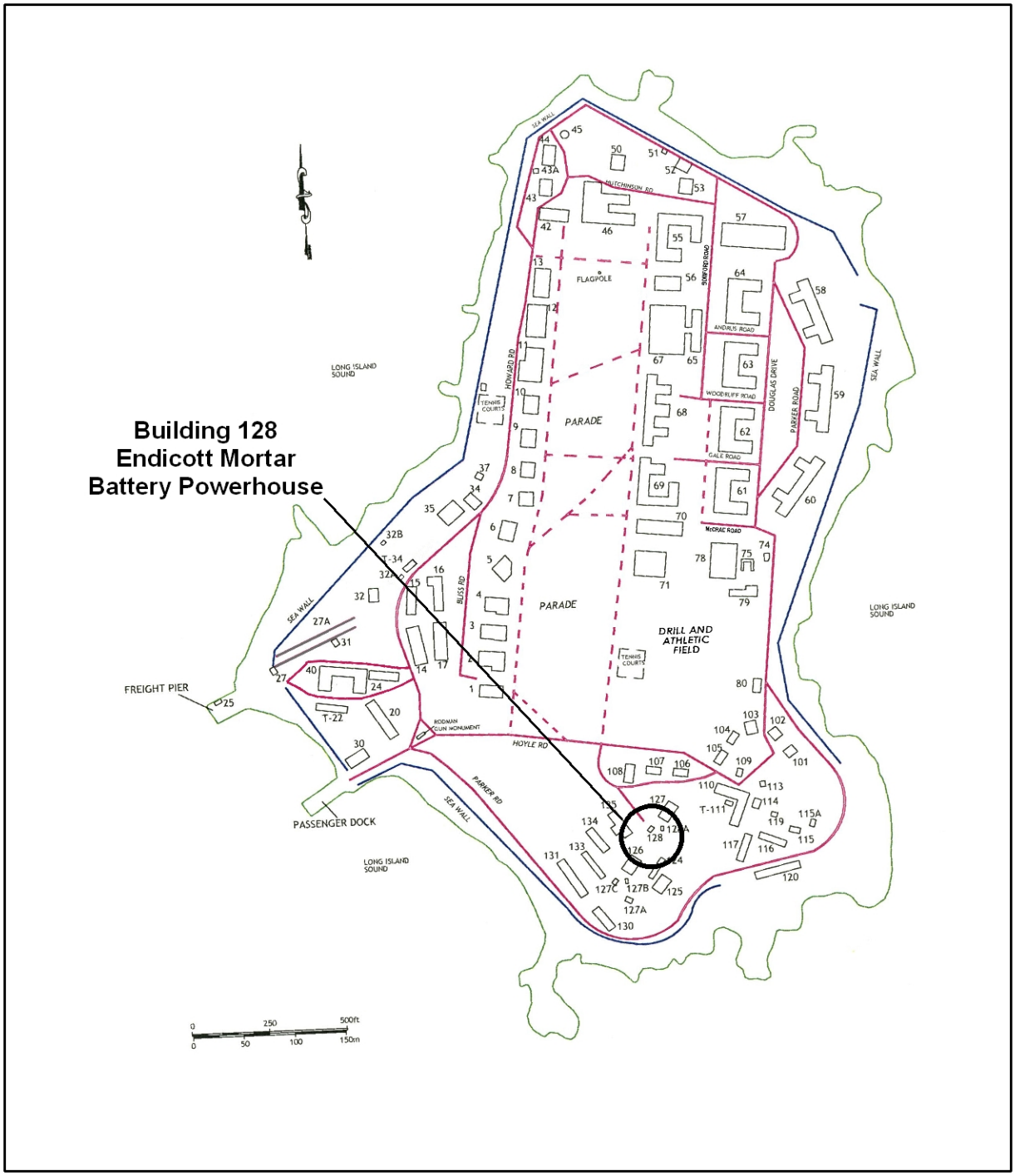
Building 128
Endicott Mortar
Battery Powerhouse
PARADE
PARADE
DRILL AND
ATHLETIC
FIELD
FLAGPOLE
TENNIS COURTS
TENNIS COURTS
HUTCHINSON RD
HOWARD RD
BLISS RD
STORRS ROAD
ANDRUS ROAD
WOODRUFF ROAD
GALE ROAD
McCRAE ROAD
DOUGLAS DRIVE
PARKER ROAD
HOYLE RD
RODMAN GUN MONUMENT
SEA WALL
LONG ISLAND SOUND
FREIGHT PIER
PASSENGER DOCK
T-34
T-22
T-111
0 250 500ft
0 50 100 150m

Figure 1. "Plan of Mortar Battery, Davids Island, N.Y., Showing Arrangement of Proposed Plant for Electric Lighting," January 1897. Sketch plan of proposed lighting system for the Mortar Battery, showing planned powerhouse. Record Group 77, National Archives, College Park, MD.

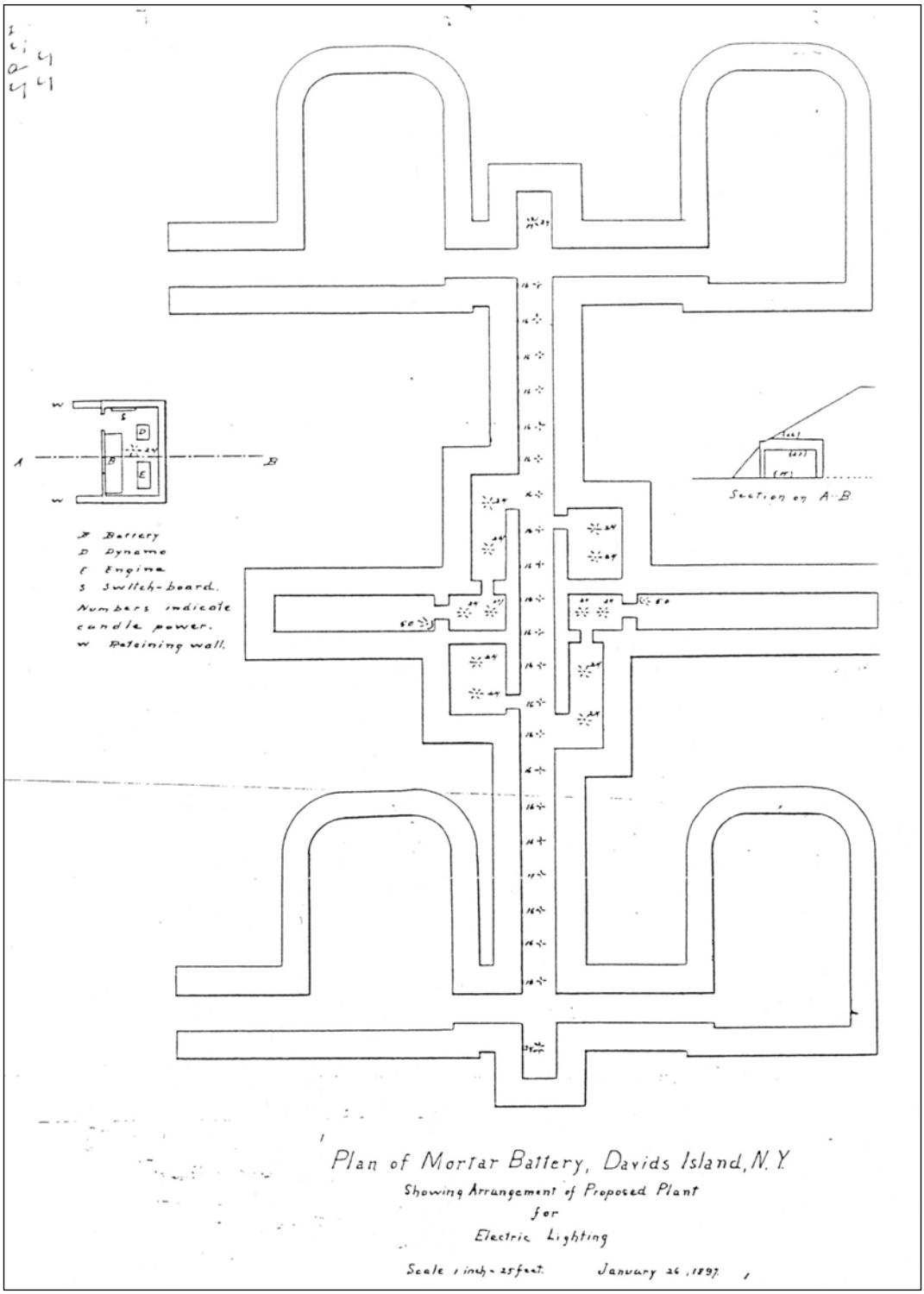

Figure 2. "Plan of Mortar Battery, Davids Island, N.Y., Showing Arrangement of Proposed Plant for Electric Lighting," January 1897, details. Plan (left) and section (right) of proposed powerhouse. Record Group 77, National Archives, College Park, MD.

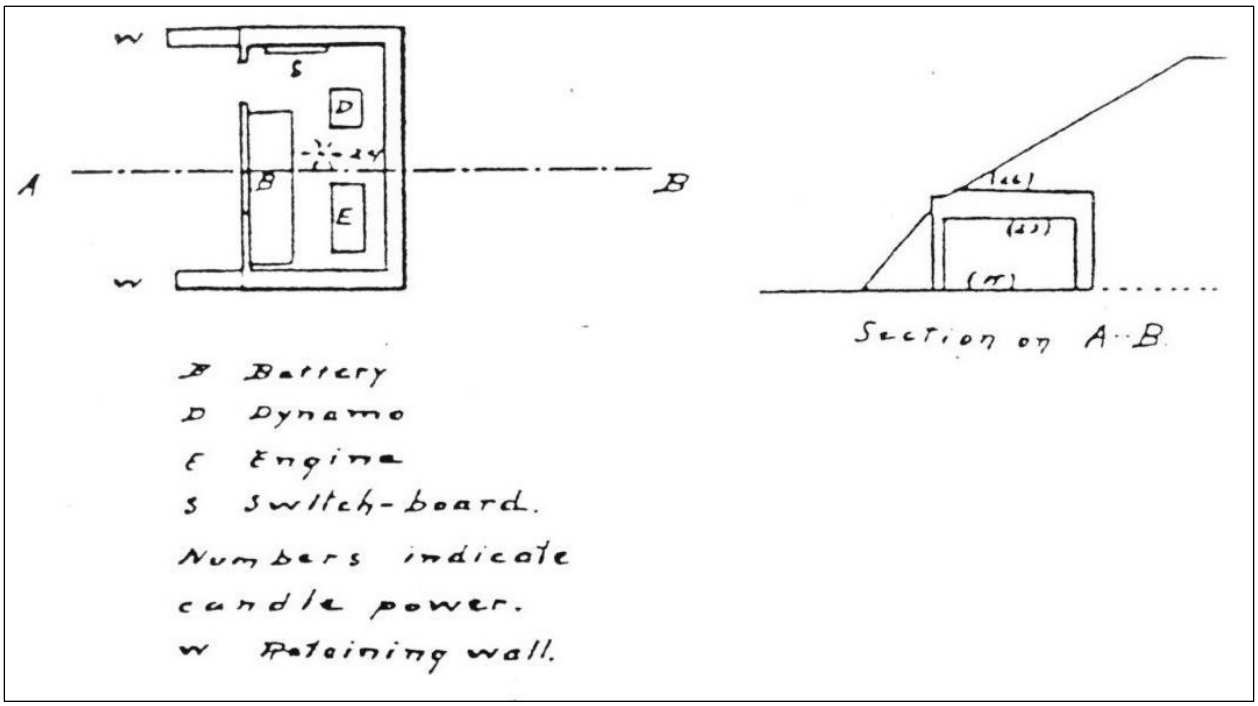

Figure 3. "Fort Slocum, Davids Island, N.Y.," May 1908. Building 128 is keyed as No. 21 at lower right of map. Record Group 392, National Archives, New York, NY.

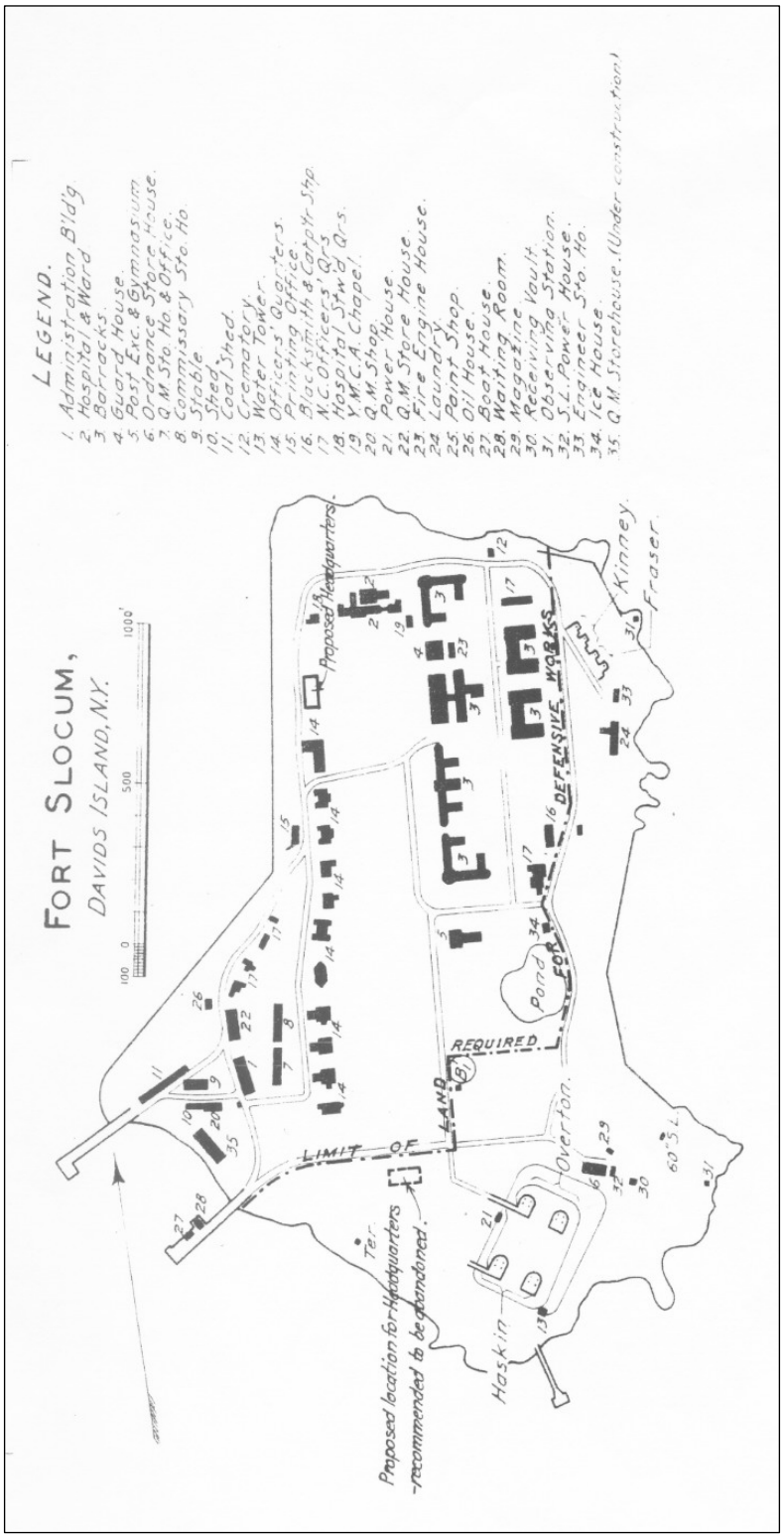

Figure 4. Vertical aerial photograph, November 20, 1923, detail. Fort Slocum's Mortar Battery with adjoining permanent and temporary buildings. North is to the top of the page. Building 128 is indicated by yellow ellipse. Original in National Archives, College Park, MD; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA.

Figure 5. High angle oblique aerial photograph of Davids Island, detail. View north. November 15, 1961. Attributed to Capt. Donald P. Blake. Building numbers have been added to identify elements of the Mortar Battery. Building 128, which has been exposed due to the removal of soil from the western flank of the battery's earthwork, is near center of image. Original in National Archives, College Park, MD; digital copy from Fort Slocum Alumni and Friends Collection, Michael A. Cavanaugh, Los Angeles, CA, custodian.

HISTORICAL DOCUMENTATION

INDEX TO PHOTOGRAPHS

MORTAR BATTERY POWERHOUSE (BUILDING 128)
Davids Island—Fort Slocum
New Rochelle
Westchester County
New York

Photographers: Matt Kierstead, PAL Inc., Pawtucket, RI, November 2005 (Photos 1-3).

Caleb Christopher, Tetra Tech EC, Inc., Morris Plains, NJ, November 2006 (Photo 4).

Kendall Walker, Tetra Tech EC, Inc., Boston, MA, June 2007 (Photos 5-6).

1. Setting of Building 128 (right), facing southwest. Building 128A is at left and the entrance to Battery Overton Pit B is in the foreground.
2. Western façade, facing east.
3. Western façade, detail: window to left of door, facing southeast.
4. Northern façade, facing south.
5. Interior, showing main room and room partition wall, facing southeast.
6. Demolition of Building 128 with steel beams in concrete roof exposed, facing southwest.

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Photo 3. Western façade, detail: window to left of door, facing southeast.

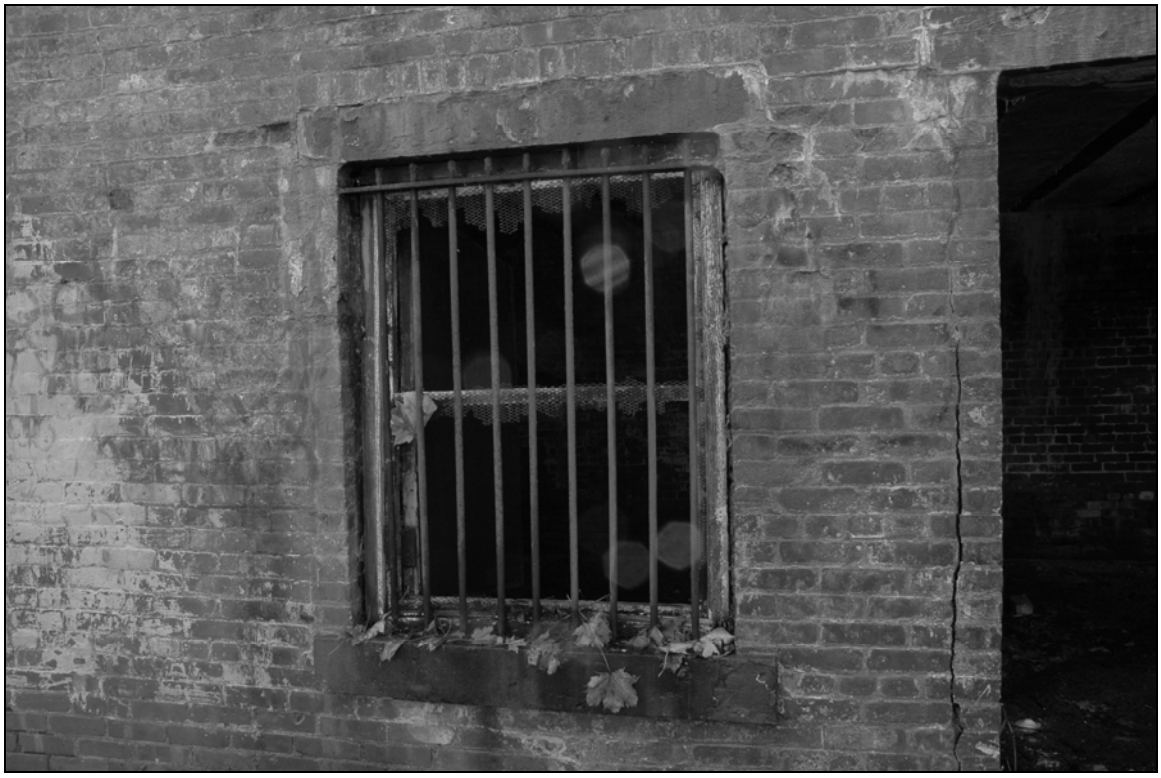

Photo 4. Northern façade, facing south.

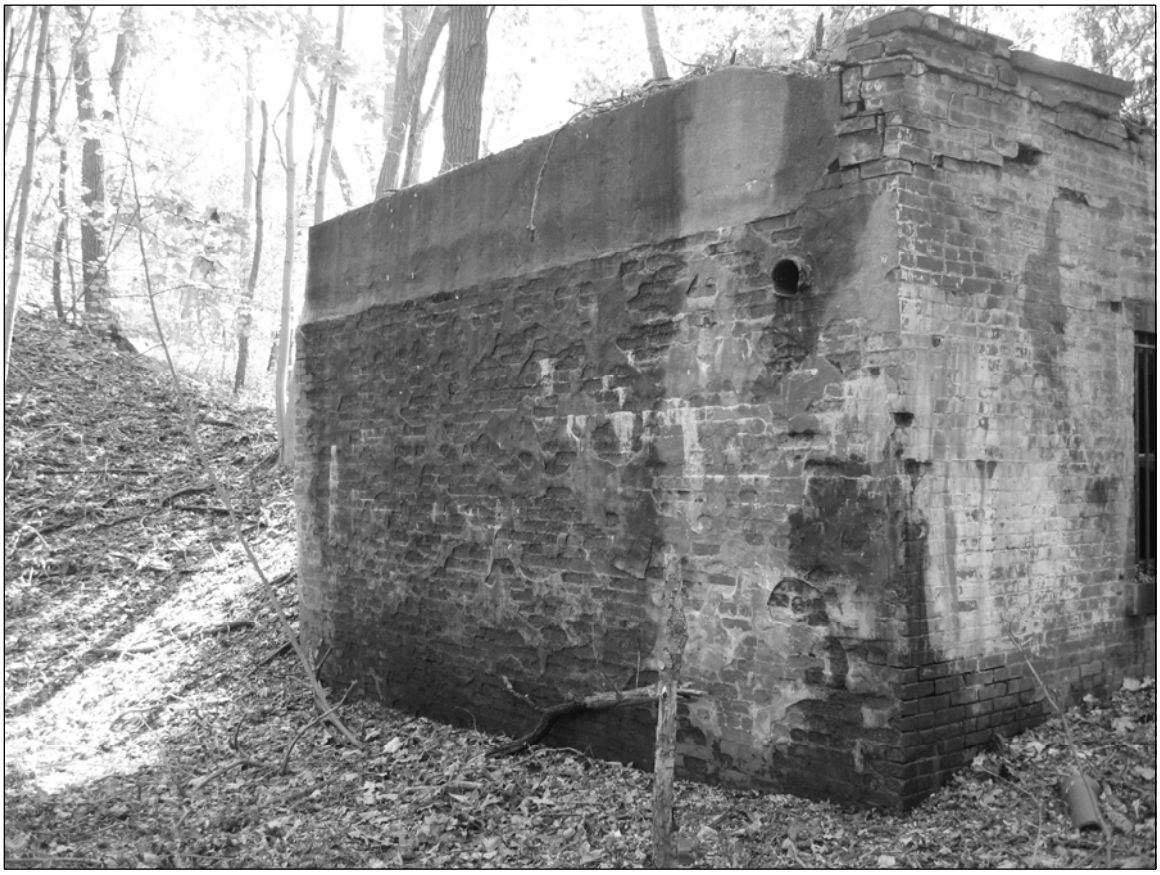

Photo 5. Interior, showing main room and room partition wall, facing southeast.

Photo 6. Demolition of Building 128 with steel beams in concrete roof exposed, facing southwest.

DAVIDS ISLAND – FORT SLOCUM HISTORICAL DOCUMENTATION

MORTAR BATTERY DATA BOOTH, BATTERY OVERTON PIT B (BUILDING 128A)

Location:	Davids Island–Fort Slocum 0.6 mi southeast of New Rochelle, New York mainland USGS Mount Vernon, NY Quadrangle UTM Coordinate (NAD 1983): 18.603655.4526311
Present Owner(s):	City of New Rochelle, NY
Date of Construction:	ca. 1904
Architect/Engineer:	U.S. Army Corps of Engineers
Present Use:	Abandoned (not in use). Extant in 2010
Significance:	The Mortar Battery Data Booth (identified as a "Fire Control Building" in earlier project documentation) for Battery Overton Pit B (Building 128A) is a component of Fort Slocum's Mortar Battery. The battery was completed in its original form in 1897. It is situated in the post's Defense and Support Area. The data booth, one of four built in ca. 1904 as additions to the Mortar Battery, transmitted targeting data from the battery commander to the mortar crews in Pit B of Battery Haskin. It thereby supported the post's role in early twentieth-century coastal defense. The building is a contributing element to the Fort Slocum Historic and Archeological District.
Project Information:	The U.S. Army Corps of Engineers, New York District (Corps), has been authorized under the Department of Defense Appropriations Act, 2004, to perform building demolition, debris removal, and remediation of asbestos materials (Project) at the Fort Slocum on Davids Island in the City of New Rochelle, New York. The purpose of the Project is to remove buildings and infrastructure from the abandoned fort installation that create safety hazards as part of a long-range plan to restore Davids Island for future use. In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800), the Corps has consulted with the New York State Historic Preservation Officer (NYSHPO) regarding the effects of the Project on historic properties. The consultation resulted in the development of a Memorandum of Agreement (MOA) among the Corps, NYSHPO, County of Westchester, and City of New Rochelle as consulting parties. This documentation report was prepared in accordance with Stipulation II.C.1 of the MOA.
Prepared by:	Christopher L. Borstel, Ph.D.
Title:	Cultural Resources Specialist
Affiliation:	Tetra Tech EC, Inc., Morris Plains, NJ
Date:	July 2007 (Revision 1, January 2010)

PART I. DESCRIPTION

The Mortar Battery Data Booth for Battery Overton Pit B (Building 128A)—formerly called a "Fire Control Building" (Olausen et al. 2005)—is located in the southeastern quadrant of Davids Island. The island is in the western portion of Long Island Sound, 0.6 miles southeast of the New Rochelle, NY, mainland, and 19 miles northeast of Midtown Manhattan (Location Map and Site Map). Davids Island is a roughly pear-shaped, relatively flat landmass consisting of approximately 78 acres above mean high water. It is heavily wooded and contains the ruins of more than 100 buildings and structures associated with the now-abandoned U.S. Army post, Fort Slocum. The ruins include barracks and quarters; quartermaster, administrative, medical, and recreation buildings; and coastal and air defense facilities. A concrete and stone seawall encircles most of the shore, and a system of roads and paths runs throughout the island. The data booth is situated on and is an element of Fort Slocum's Battery Haskin-Overton and is specifically associated with Pit B of Battery Overton (Building 127). The Mortar Battery is a concrete and earth fortification that dominates the terrain of the southeastern end of Davids Island and occupies the central portion of the Defense and Support Area. This area is a functionally-mixed section of Fort Slocum that, in addition to fortifications and defensive structures, also includes utility and support-services buildings, women's barracks, and other types of structures.

Building 128A was one of three mortar battery data booths that were extant when the historic architectural inventory of former Fort Slocum was completed in 2004 (Olausen et al. 2005). In addition to Building 128A, the buildings included Building 127B, which was associated with Battery Haskin Pit B and an unnumbered structure associated with Battery Haskin Pit A. The three buildings (along with a fourth demolished ca. 1942) were similar to one another and were derived from a common design. An extended discussion of these buildings is included in the documentation for Building 127B, which appears elsewhere in Volume 5 of *Documentation of Contributing Elements, Fort Slocum Historic and Archeological District, Davids Island, City of New Rochelle, New York.*

The building is situated at the left rear—i.e., southwestern—corner of Battery Overton Pit B (Figures 1-2; Photos 1-9). It stands just south of the entrance ramp to Battery Overton, occupying a small platform cut into the sloping shoulder of the Mortar Battery earthwork to the south of the pit and ramp. This platform is still evident in the terrain that adjoins the building to the south and east. In these directions, the ground rises sharply above the building. However, later alterations lowered the earthwork on the west, and in this direction, the ground is now lower than the building and slopes gently away from it.

Building 127B is a small monolithic concrete building comprised of an integral foundation slab, walls, and roof. Low L-shaped concrete retaining walls project to the east and west from the southern corners of the building. The joints between the sides of the building and the retaining walls are well finished and fully intact and may also be integral sections of the structure. There is no indication in any exposed surface of the building that steel reinforcing rods or mesh was employed, but a historical account says that structures of this type were constructed of reinforced concrete (Winslow 1920:359). The concrete used to erect the building appears similar in composition, strength, and durability to that used throughout the Mortar Battery. Faint horizontal trace impressions of the concrete formwork are visible on the exterior and interior walls of the building. The formwork was evidently constructed with care, as there are numerous small cast-in-place details, such as stepped or chamfered edges and sloping surfaces. On the exterior walls, these marks are somewhat obscured by a surface texture that alternates between smooth and rough lenticular, camouflage-like patches, though it is not clear whether these patches are incidental and original, a result of weathering, or a later intentional alteration. The interior walls are smooth, and the form marks are more uniformly visible.

No traces of painted signs were noted on the exterior of the building. However, in the interior over half the wall surface is covered by several colors of paint. These painted surfaces probably post-date the closure of Fort Slocum, as there is also considerable graffiti on the walls.

The outside footprint of Building 128A is 9 feet-11½ inches by 10 feet-10 inches, exclusive of the L-shaped retaining walls, and are estimated to be 15 to 18 inches thick. The retaining walls, measuring approximately 1 foot thick, project about 4 feet from the building's southern corners and create clear spaces about 3 feet wide adjacent to the building's eastern and western walls. These L-walls have a maximum height of roughly 4 feet and their northern legs slope to the ground at around a 1:1 pitch. The building stands 7 feet-7½ inches high from the ground surface to the top of the roof. Its flat roof overhangs the building's walls by 3 inches. The overhanging section of the roof is around 6 inches thick but the main part of the roof, which covers the building interior, is about 12 inches thick. There is a single entrance on the western side of the building, which faces away from the mortar pit. The entrance has a hollow door of riveted steel, 2 feet-6 inches wide by 5 feet-10 inches high. The door is designed to slide open and hangs from two wheels that travel on a steel rail affixed to the building's exterior wall. Three small windows are located in the northeastern corner of the data booth, which overlooks the mortar pit. One window is located in each wall, while the third window cuts across the corner where the two walls intersect. The window openings are beveled and taper from 10 by 20 inches at the exterior to approximately 9 by 12 inches on interior. Within this opening, a single sheet of 6 by 6-inch glazing is set in a 9 by 9-inch wood frame behind coarse steel wire mesh; the balance of the opening (about 3 inches wide) is filled by a thin slab of concrete.

A narrow slot in the eastern wall (2½ inches by 3 feet-3 inches) is fitted with a steel signboard frame, which extends from the interior to the exterior of the building. The frame, which is partially intact, carried five sliding panels on I-channels. These panels, designed to have targeting information written on them in chalk, could be pushed out of the building through the slot and pulled back in. Aside from the steel signboard frame, the interior of Building 128A is plain. The interior has a floor of 7 feet-0 inches by 8 feet-3½ inches and is about 6 feet-7½ inches from floor to ceiling. The walls are sheer, and there are no niches, notches, shelves, or similar details cast into them. Two or three metal-sheathed wiring conduits, each at a different location, are cut off where they come out of the wall. These were presumably telephone and electrical lines, but no details were noted. There is no wiring attached to the interior walls of the building.

PART II. HISTORICAL NARRATIVE

Fort Slocum

Between 1862 and 1965, Davids Island was the site of two successive posts of the U.S. Army posts. The earlier of these began as DeCamp General Hospital (1862-1866) and continued in episodic operation as a mustering ground and recruit subdepot until 1874. During this period, the Army first leased Davids Island from its owner, and then purchased it outright in 1867. Following a four-year hiatus, the Army re-established its presence on the island in 1878, and it served continuously as an Army post until 1965. The post was named Fort Slocum in 1896. Between 1878 and 1965, it served as a recruit intake and training center, coastal and air defense installation, embarkation and debarkation station, and advanced training school. In 1967, the federal government sold Davids Island to the City of New Rochelle, which in turn sold it to Consolidated Edison Company of New York, Inc., the following year. Consolidated Edison returned ownership of most of the island to the city in 1976. The island has been abandoned since the late

1960s, soon after Fort Slocum closed. During the past forty years, the over 100 buildings and structures that formerly comprised the post have deteriorated through neglect and vandalism. The U.S. Army Corps of Engineers began a demolition and restoration project on the island in 2004, which is expected to pave the way for future use or development under the city's auspices.

A more extensive summary of Fort Slocum's history appears in the documentation for Building 127B elsewhere in Volume 5 of this documentation. Detailed accounts of Fort Slocum's history can be found in a general historic overview (Tetra Tech 2008) and in Olausen et al. (2005), among other sources.

Mortar Battery Data Booth, Battery Overton Pit B (Building 128A)

The Mortar Battery Data Booth, Building 128A, is a component of the Endicott-era Mortar Battery, formally called Battery Haskin-Overton (Buildings 125-127). This fortification was constructed on Davids Island in the early to mid-1890s. It had sixteen 12-inch heavy mortars divided among four carefully prepared, interconnected pits and surrounded by earth and concrete parapets. The Mortar Battery was operational from 1897 to 1906, during which it received some improvements and minor alterations. The fortifications at Fort Slocum were part of a network of coastal defenses protecting the approaches to New York Harbor. The role of mortar batteries in these defenses was to fire large, explosive projectiles at high angles so they could rain down on the lightly armored decks of enemy ships. Normally, several mortars would fire simultaneously to create a shotgun-like fall of shells, increasing the likelihood of a successful attack. Fort Slocum's mortars, among the first to come into service, had a maximum range of around 5.5 miles and fired projectiles weighing about 800 pounds. Each group of four mortars occupied a deep pit surrounded by high earth walls with concrete revetments. The Mortar Battery's large earthwork, combined with reinforced concrete construction of critical structural components and the use of subterranean connecting tunnels and storerooms, was designed to make the batteries resistant to direct-fire naval guns. The Mortar Battery and its history are described in greater detail elsewhere in Volume 5.

Building 128A was one of four data booths constructed at the Mortar Battery in ca. 1904. All the structures built at Fort Slocum's battery are Portland-type data booths, which were based upon buildings first erected at Portland, Maine, in 1903. The data booths (identified as "fire-control buildings" in earlier historic architectural inventories and studies of former Fort Slocum) were part of an improved system of fire control that the Army developed for coastal artillery during the 1890s and early 1900s. The booths conveyed targeting information to the crews manning the mortars. The information was developed by the battery commander and his assistants, who transmitted it by telephone to operators in the booths. The operators would write the firing solution in chalk on the sliding blackboards of the booth and then slide the boards out of the building so they could be read by the men operating the mortars (McGovern and Smith 2006:51-53; Smith 2007; Winslow 1920:359-360). Documentation for Building 127B, elsewhere in Volume 5, contains a more extensive discussion of Fort Slocum's data booths and their historical development.

Fort Slocum was deactivated as a coastal artillery fortification in 1906, before the Army's improved system of fire control was fully implemented there. The post's batteries remained in caretaker status until the First World War, and by 1920 the Coast Artillery Corps had removed all of its artillery pieces and entirely abandoned the fortifications. Thereafter, Fort Slocum's officers gradually modified the Mortar Battery as they adapted and used it for new purposes. It was incorporated into a small golf course in 1926, and later, in ca. 1942, the northeastern mortar pit was demolished for construction of a small-arms

firing range. In the 1950s, the Integrated Fire Control Area of a Nike antiaircraft missile battery was situated on the southwestern flank of Mortar Battery, while much of the earthwork soil between the two western pits was removed, presumably for use as fill elsewhere on the post. The southern two data booths of the Mortar Battery, associated with Pits A and B of Battery Haskin seem to have been modified for explosives and paint storage in the 1940s or 1950s. Building 128A, however, appears to have remained unmodified, though the earthwork terrain to the southwest was altered, and is now the best preserved of the original four data booths.

Building numbers were not assigned to any element of the mortar battery complex until late 1957. At that time, the data booth associated with Battery Overton Pit B (the present Building 128A) seems to have been numbered as Building 137. The other extant booths were designated as Buildings 126 (Haskin Pit A) and 127 (Haskin Pit B). The pits themselves do not appear to have been numbered. By the time of the first architectural inventory in the mid-1980s (Berger 1986), the numbering sequence had changed and numbers were applied to the pits rather than to the data booths, which do not even appear on inventory maps. It is unclear whether these changes were intentional or resulted from misinterpretation and misreading of the system that existed when Fort Slocum closed. In any case, with these changes, Battery Overton Pit B became Building 127, and the associated fire control building was unnumbered, or perhaps was implicitly regarded as part of the same structure. During the architectural reconnaissance conducted by the Public Archaeology Laboratory, Inc., and Tetra Tech in November 2004, the fire control building associated with Battery Overton Pit B was recorded as Building 128A (Olausen et al. 2005).

PART III. SOURCES OF INFORMATION

Published Materials

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Louis Berger & Associates, Inc.
1986 *Fort Slocum, Davids Island, New York: A Historic Architectural Assessment*. 2 vols. Submitted to Dresdner Associates, Jersey City, NJ, by the Cultural Resource Group, Louis Berger & Associates, Inc., East Orange, NJ.

Olausen, Stephen, Matthew Kierstead, and Jeffrey Emidy
2005 *Historic Architectural Survey and National Register Evaluation, Davids Island/Fort Slocum New Rochelle, New York*. Prepared for Tetra Tech FW, Inc., Morris Plains, New Jersey, by PAL, Inc., Pawtucket, Rhode Island.

Smith, Bolling
2007 E-mail correspondence with Christopher L. Borstel, Tetra Tech EC, Inc., August 28-29, October 24-25, and November 19-20 concerning matters pertaining to Fort Slocum's Battery Haskin-Overton, including dates of operation, data booths and fire control, and characteristics of the Model 1886 breechloading mortar.

Tetra Tech EC, Inc.
2008 "Fort Slocum: Overview." In *Historic Building Documentation, Fort Slocum Historic and Archeological District, Davids Island, City of New Rochelle, Westchester County, New York*, Volume 1. Prepared for the U.S. Army Corps of Engineers, New England District, Concord, Massachusetts, by Tetra Tech EC, Inc., Boston.

United States Army Corps of Engineers
1920 "Report of Completed Works—Coast Defenses of Eastern New York, Fort Slocum." April 15, 1920. Original on file at the National Archives, College Park, MD, probably in Record Group 77. Copy provided through the Coast Defense Study Group Document Scanning Project, CDSG ePress, Peoria, IL, Mark Berhow, Manager, and described at http://www.cdsg.org/cdrom1.htm.

Maps and Drawings

May 1908 "Fort Slocum, Davids Island, N.Y." U.S. Army Coast Artillery Corps, New York Harbor Eastern Long Island Sound Approaches Fortification Map Series. Record Group 392, National Archives, New York, NY.

August 1921 "New York Harbor, Fort Slocum, Davids Island." U.S. Army Coast Artillery Corps, New York Harbor Eastern Long Island Sound Approaches Fortification Map Series. Revisions of January 14, 1915 map. Record Group 392, National Archives, College Park, MD.

May 1949, revised through November 1957 "Fort Slocum, New Rochelle, N.Y., Electric Distribution System Primary Lines." Office of Post Engineer, Fort Slocum. On file at National Archives, College Park, MD.

December 1961 "Map of Fort Slocum (Davids Island), New Rochelle, N.Y." Prepared under the direction of the First Army Engineer by the Engineer Intelligence Division, Governors Island, New York. Record Group 92, National Archives, College Park, MD.

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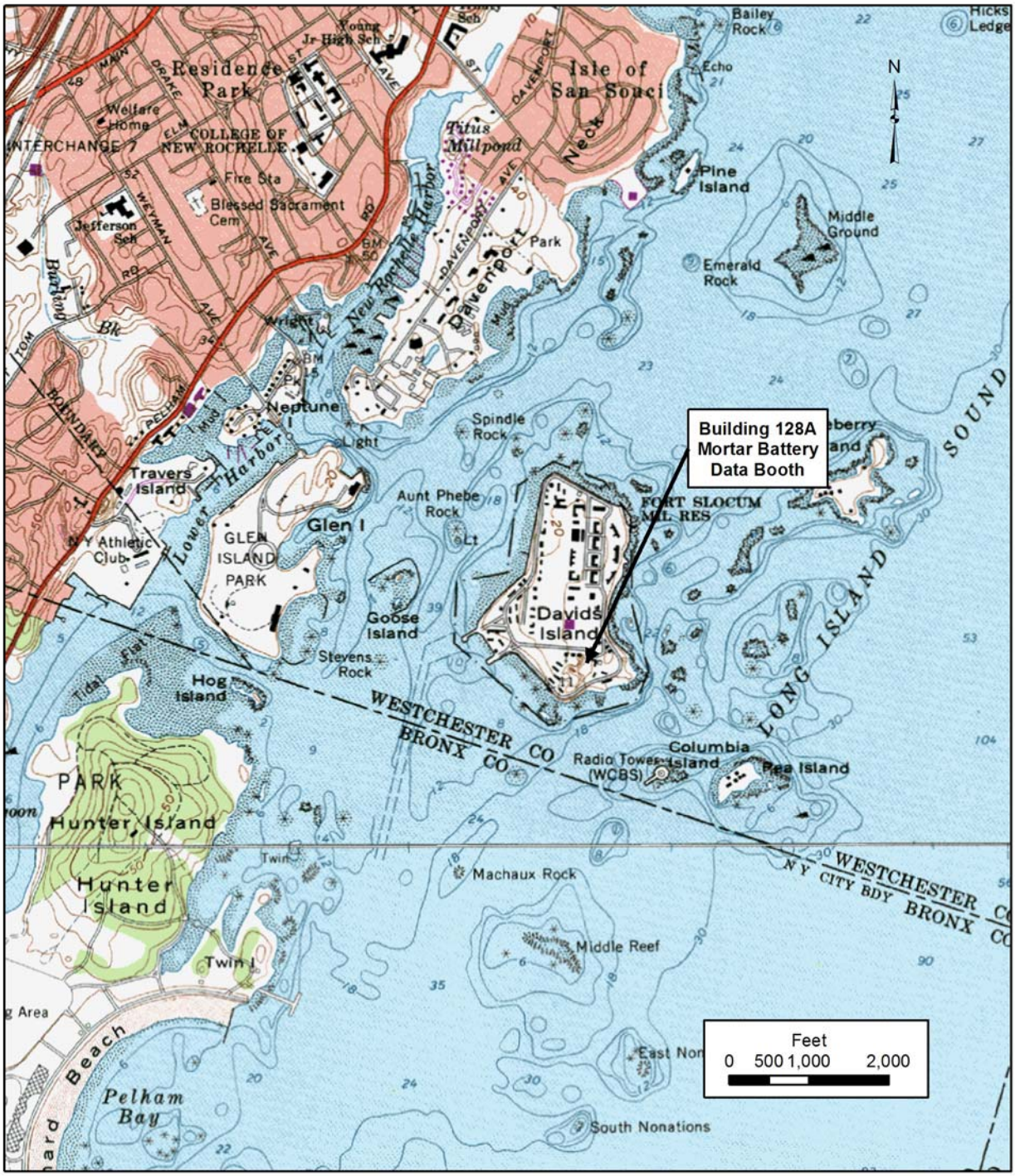
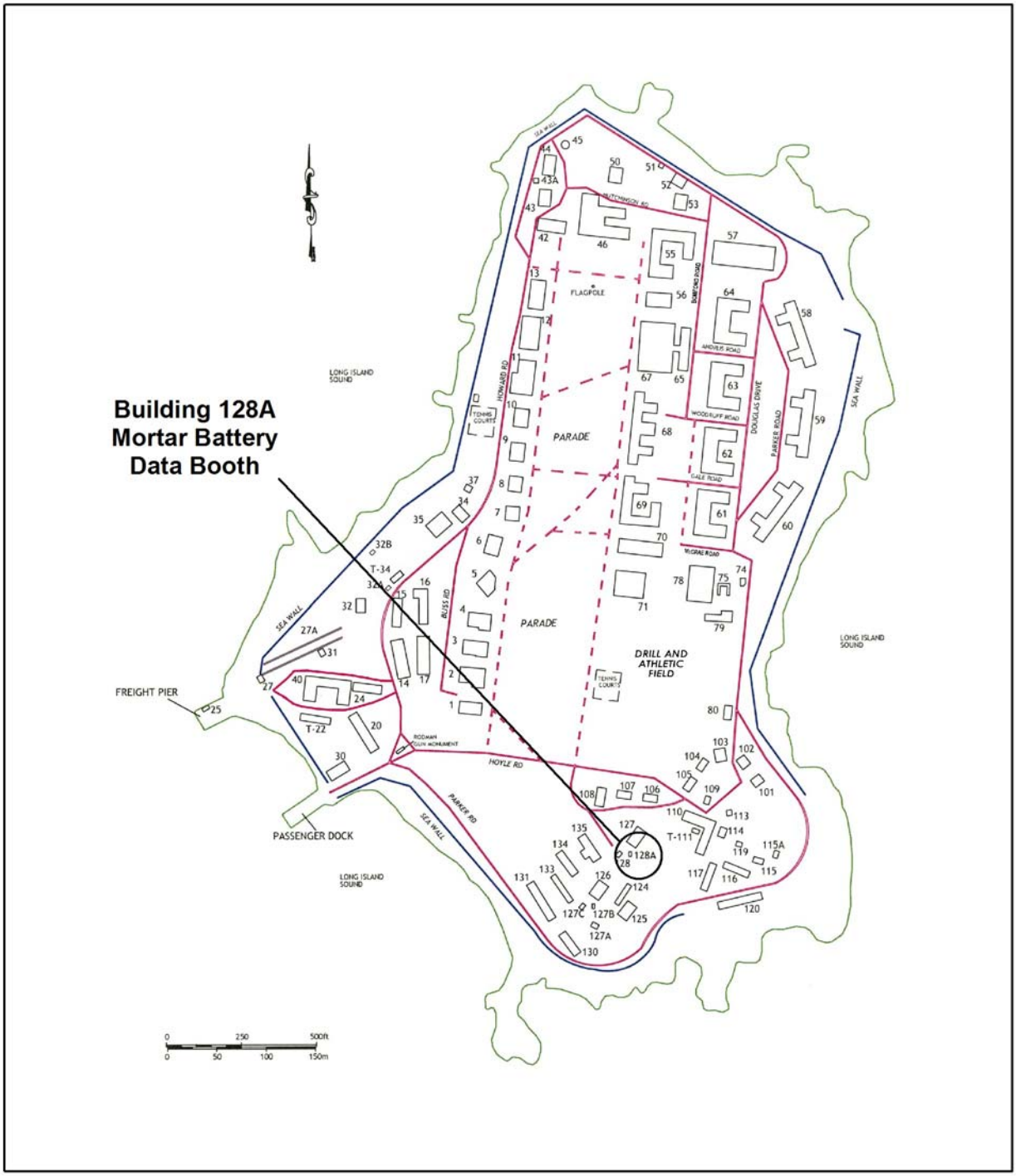


SITE MAP


Building 128A
Mortar Battery
Data Booth
PARADE
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DRILL AND ATHLETIC FIELD
FLAGPOLE
TENNIS COURTS
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BUSS RD
HOYLE RD
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BAMFORD ROAD
ANDRUS ROAD
WOODRUFF ROAD
GALE ROAD
WIGRAE ROAD
DOUGLAS DRIVE
PARKER ROAD
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1. Setting of Building 128A (left), facing southwest, with Building 128 at right rear. In foreground is entrance to Battery Overton Pit B.
2. Building 128A (right), adjoining entrance ramp to Battery Overton (left), facing southeast. Entrance at left leads to tunnel system in the central part of the Mortar Battery.
3. Building 128A and Battery Overton entrance ramp from floor of mortar pit, facing south.
4. Northern and western façades, facing southeast.
5. Northern and eastern façades, facing southwest.
6. Western façade, detail: entrance and hollow steel door, facing southeast.
7. Eastern façade, detail: remnants of sliding blackboard and frame at southeastern corner, facing south.
8. Interior, detail: sliding blackboard frame in southeastern corner, facing east.
9. Interior, detail: windows for viewing activity in mortar pits in northeastern corner, facing north.

Photo 1. Setting of Building 128A (left), facing southwest, with Building 128 at right rear. In foreground is entrance to Battery Overton Pit B.

Photo 2. Building 128A (right), adjoining entrance ramp to Battery Overton (left), facing southeast. Entrance at left leads to tunnel system in the central part of the Mortar Battery.

Photo 3. Building 128A and Battery Overton entrance ramp from floor of mortar pit, facing south.

Photo 4. Northern and western façades, facing southeast.

Photo 5. Northern and eastern façades, facing southwest.

Photo 6. Western façade, detail: entrance and hollow steel door, facing southeast.

Photo 7. Eastern façade, detail: remnants of sliding blackboard and frame at southeastern corner, facing south.

Photo 8. Interior, detail: sliding blackboard frame in southeastern corner, facing east.

Photo 9. Interior, detail: windows for viewing activity in mortar pits in northeastern corner, facing north.