historic resource study

fort hancock: 1948–1974

november 1982

GATEWAY

SANDY HOOK UNIT

NATIONAL RECREATION AREA /NEW JERSEY

1130 (DSC-PG)

Memorandum

To: Regional Director, North Atlantic Region

From: Assistant Manager, Mid-Atlantic/North Atlantic Team, DSC

Reference: Gateway, No [illegible]. No. Fort Hancock, "A Resource Study Fort Hancock, 1948-1974"

Subject: Transmittal of Final Report

We are pleased to forward herewith three copies of the report, "Historic Resource Study, Fort Hancock: 1940-1974, Gateway, Sandy Hook Unit," prepared by Historian Kevin C. Bearss.

(sgd) Gerald D. Patten
Gerald D. Patten

Enclosures

cc:
NASC-400-Mr. Holland, w/enc.
NASC-404-Mr. Bearss, w/enc.
NASC-408-Ms. Reiss, w/encs.
Mgr., Sandy Hook Unit, w/encs.
NFC-[illegible]-Mr. Baker, w/enc.
Supt., Gateway, w/encs.

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HISTORIC RESOURCE STUDY

FORT HANCOCK: 1948-1974

SANDY HOOK UNIT

GATEWAY NATIONAL RECREATION AREA

MONMOUTH COUNTY

NEW JERSEY

By

Edwin C. Bearss

DENVER SERVICE CENTER
BRANCH OF CULTURAL RESOURCES
MIDATLANTIC/NORTH ATLANTIC TEAM
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR
DENVER, COLORADO

FOREWORD

This Historic Resource Study, Fort Hancock, 1948-74 was programmed and has been prepared as a continuation of the Historic Resource Study, Fort Hancock, 1895-1948, submitted in 1976 and published and distributed by the National Park Service, Denver Service Center, in September 1981. These studies have been undertaken to satisfy research needs and to provide an understanding of the significance of the long-term military presence on Sandy Hook, as developed in discussions with the then chief of professional services, North Atlantic Region, F. Ross Holland, and his staff; area manager, Sandy Hook Unit, Gateway National Recreation Area, Ken Morgan, and his staff; and former Denver Service Center architect Gary Higgins.

The goal was to provide management with a documented narrative history of Fort Hancock from 1948, with some overlap into the years 1945-48, through 1974, when the Army formally transferred responsibility for the area to the National Park Service and the United States Coast Guard. Coincidentally, the effort to sketch the construction history of post structures has been continued, with emphasis on permanent buildings and improvements. Emphasis has also been placed on the identification of those structures and features necessary to the preservation and interpretation of the history of Fort Hancock, as well as the evaluation of the significance of the post during the years in which the United States developed and deployed the NIKE family of surface-to-air missiles as a defense of its population and strategic centers against first airplane and then missile attacks.

To accomplish these broad goals, we had hoped to rely principally on primary documentary materials located at the Washington National Records Center, Suitland, Maryland, or at regional records centers. Discussions with colleagues at the National Archives, the Washington National Records Center, the Department of the Army's Center of Military History, and the Adjutant General's Office revealed that there is no information as to the whereabouts of the Fort Hancock post records for the 1948-74 period.

Colonel Walter F. Strobridge, ret., former Chief Historian, Services Division, Center of Military History, speculated that the Army Air Defense Command (ARADCOM) records are probably stored in a Colorado warehouse. Personnel at the Washington National Records Center reported that it will be a number of years before the Department of the Army records for this period in their possession will be inventoried. Mr. Paul Taburn of the Adjutant General's Office was unable to locate in his files data cards supposedly submitted when a post is deactivated providing information as to disposal of its records.

In view of this situation, our research efforts initially focused on a review of contemporary newspapers--the Library of Congress for the New York Times, and offices of various Monmouth County newspapers and libraries for files of the Asbury Park Evening Press, Long Branch Daily Record, Highland Star, etc.--and military post newspapers in the files of the Sandy Hook Unit, Gateway National Recreation Area, and the U. S. Army Military History Institute, Carlisle, Pennsylvania.

Files at the Sandy Hook Unit provided newspaper clippings, scrapbooks, and data on maintenance and repair of buildings transferred by the Army, while the Engineer Office at Fort Dix, New Jersey, contained a number of documents.

Many people have assisted with the preparation of this report. Particular thanks are due Tom Hoffman and Elaine Harmon, historical technicians at the Sandy Hook Unit. Enthusiastic and well informed, they shared their knowledge of the area and answered numerous questions. Former North Atlantic Regional historian and friend Ricardo Torres-Reyes (deceased) and regional historical architect Blaine Cliver made available their expertise and gave encouragement. As heretofore, Emanuel Ray Lewis, friend and fortifications expert par excellence, was available for consultation.

Henry Judd, former chief restoration architect for the National Park Service; architects Blaine Cliver and Gary Higgins; and Dr. Harry Pfanz, former chief historian, National Park Service, reconnoitered Fort Hancock

with us and shared their knowledge of military architecture and surface-to-air missiles.

At the Department of the Army's Center of Military History, Ms. Hannah Zeidlik, Moreau Chambers, Kim Holien, John Wilson, Robert Wright, and Colonel Walter F. Strobridge (ret.) made major contributions to the success of this undertaking.

John Slonaker, chief, historical reference section of the Department of the Army's Military History Institute, besides providing me with bibliographic data on the NIKE missile system, made available the facilities for which he is responsible and arranged to have a number of items copied.

My colleagues of the Mid-Atlantic/North Atlantic Team, Denver Service Center, Mrs. Nan V. Rickey, chief, Branch of Cultural Resources, and historian Harlan D. Unrau reviewed the manuscript, made valuable comments, and shielded me from bureaucratic distractions. Dr. Harry Butowsky of the Cultural Resources Management Division, Washington Office, and Tom Hoffman of the Sandy Hook Unit also reviewed the draft manuscript with their habitual perception.

We are particularly indebted to Evelyn Steinman, editorial clerk, Denver Service Center, who had the difficult and thankless task of typing the manuscript.

Edwin C. Bearss

RECOMMENDATIONS

Fort Hancock, in the years between 1955 and 1974, again played a key role in the nation's defense system. From the early 1890s through World War II, the big guns, seacoast mortars, rapid-fire guns, and submarine mines of the Sandy Hook Harbor Defenses Project had guarded the direct approach to America's largest city and most important seaport against attack by hostile warships and an amphibious invasion.

But in the Cold War years, following the Berlin Blockade and coincident with the Korean Conflict, the threat to United States population and industrial centers came from a new dimension. To protect the nation's air space against penetration by Soviet Union long-range bombers, the United States Army developed and deployed first the NIKE-AJAX and then the NIKE-HERCULES missiles.

The Department of Defense selected Fort Hancock as the site of one of its NIKE installations. Simultaneously, an important command station to coordinate this weapons system with Air Force jet interceptors was established at the Highlands. To support the Fort Hancock tracking and launching stations, the Corps of Engineers between 1954 and 1962 supervised construction by contractors of a number of facilities and improvements on that part of the Fort Hancock reservation south and east of Camp Low and north of the former Spermaceti Cove Coast Guard Station.

Until deactivated by the Army and turned over to the National Park Service in 1974, first the NIKE-AJAX and then the NIKE-HERCULES occupied pivotal roles in the Department of Defense's plan for the protection of the vital New York City-Philadelphia corridor against attack by Soviet air armadas. The Fort Hancock antiaircraft missile system, constituting as it did a vital element in supersonic weaponry, is of first order of significance. The facilities and groups associated with this system merit inclusion on the National Register. Their importance is underscored by the demolition and rapid deterioration of similar facilities

associated with this weapons system. For example, vandalism and the elements have taken a terrible toll on the NIKE-HERCULES installations at Golden Gate National Recreation Area.

In view of this situation, it is recommended that the Fort Hancock NIKE-HERCULES installations be protected and preserved as an ensemble to interpret the vital role that they played in the nation's defense posture during the Cold War years.

TABLE OF CONTENTS

LIST OF MAPS

LIST OF PHOTOGRAPHS

Photograph 9

Close-up view of NIKE-HERCULES missiles being raised into a firing position at the Fort Hancock Military Reservation Launching Site, ca. 1969.

Photograph 10

The Fort Hancock Military Reservation Radar Site showing the once familiar "Gold Ball" domes made of fibreglass that protected the delicate radar equipment from the weather, ca. 1969-73.

Photograph 11

Above: Map of lower New York Bay and surrounding territory (black star in center foreground represents location of radar).

Below: Image of same area on "plan-position-indicator" oscilloscope of Signal Corps radar located at Fort Hancock.

I. POST-WORLD WAR II YEARS LEAD TO FORT'S DEACTIVATION

A. Technological Revolution in Weaponry Causes Nation to Reevaulate Its Defenses

1. The Background

Victory in World War II was followed by rapid demobilization of the nation's armed forces and drastic reductions in defense spending. Lessons learned during that conflict dictated a change in military thinking. Amphibious invasions in the Pacific and Europe had shown that armies could be landed on hostile beaches after the defenses had been softened by aerial and naval bombardments without having to storm and occupy port facilities. The airplane had demonstrated its mastery over the battleship, and for as long as the United States carrier task forces ruled the waves, there was no risk of the nation's seacoasts being exposed to naval bombbardment. In the summer and autumn of 1944 Germany had launched its V-1 and V-2 rockets against Great Britain. They were crude, but their intercontinental successors made coastal defense fortifications obsolete. Although Winston S. Churchill had made his "iron curtain" speech at Fulton, Missouri, on March 15, 1946, the War Department, in the immediate postwar months, placed on inactive status or disposed of most of its harbor defenses.

2. Fort Hancock in 1947

By the summer of 1947 most of the big seacoast guns had been removed from the Sandy Hook defenses and had been sold for scrap. Visiting the Fort Hancock Military Reservation in August 1947, a reporter for the Asbury Park Sunday Press spoke with Colonel Charles Y. D. Ostrom, who had commanded the harbor defenses of New York since March 19, 1944. Ostrom, in discussing the fort's future, stated that service practice with the coastal defense guns was a thing of the past, and that it had been two years since any mines had been positioned.

Though Colonel Ostrom declined to say how many men were on post, the number of empty barracks demonstrated that the fort was garrisoned by a skeleton force. On weekends, reserves, arriving for training and inspection, increased the military population. Indeed, there

were so many empty quarters that some were occupied by First Army officers from Governors Island.

Signal Corps personnel, as they had since the mid-1930s, continued to operate and man several experimental stations on remote sections of the reservation.

The Fort Monmouth Army mess had been permitted use of the clubhouse and beach about a mile north of the south gate. Fort Hancock personnel and their families bathed near the tip of the Hook.

The Army provided a building and two teachers and supplies to Middleton Township for schooling of service personnel children from the first through the sixth grades. Post religious services were still held in St. Mary's Chapel.

Civilians were again allowed to fish from the beaches at the southern end of the reservation. More than 14,000 permits had been granted, Colonel Ostrom remarked.[1]

3. Disarming the Batteries

Fifteen months later, in November 1948, workmen arrived at the fort and began dismounting and removing the two huge 16-inch guns from Battery Lewis. An Army spokesman, when questioned, told the press that, in the years since 1943, the Department of the Army had determined to scrap its huge coastal defense guns as obsolete. The post's 6-inch guns, he added, were also scheduled for removal.[2]

There was stationed at Fort Hancock at this time less than 500 officers and men, most of whom were assigned to the disciplinary barracks.

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1. Asbury Park Sunday Press, August 24, 1947. At the end of the national emergency, Ostrom had reverted from brigadier general to his permanent rank of colonel.

2. New York Times, November 23, 1948, p. 24.

With the increased reliance on air power, the New York Times correspondent informed his readers, it has been decided that guns emplaced in fixed positions are out of date. There were, however, no plans to abandon Fort Hancock, because huge quantities of ammunition were stored on the reservation.[3]

The two 6-inch guns emplaced at Battery Gunnison (redesignated Battery Peck) were not salvaged. They remained in position until 1968, when they were dismounted and transferred to the Smithsonian Institution. Subsequently, plans to establish an Armed Forces Museum and mount the pieces at Fort Washington were scrapped, and the guns were returned to Fort Hancock by the National Park Service and again emplaced in Battery Gunnison.[4]

4. Garrisoning the Post

During the 29 months ending December 31, 1949, Fort Hancock was garrisoned by personnel from the 1225th Army Service Unit, Headquarters and Headquarters Detachment, Harbor Defenses of New York; Branch U. S. Army Disciplinary Barracks (USDB); 4th Echelon Armament Repair Shop; and the Station Medical Detachment.[5]

The 1225th Army Service Unit had been organized at Sandy Hook in 1941 as an administrative and logistical unit to support the tactical commands. It was a table of distribution and allowance unit and as such was a provisional organization. The 4th Echelon Armament Repair Shop had been organized at Fort Hancock in the summer of 1945, and the

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3. Ibid.

4. Telephone interview, Lt. Col. Calland with Edwin C. Bearss, March 3, 1981. Lt. Col. Robert Calland was in charge of moving the two 6-inch guns from Battery Gunnison to the Smithsonian Institution's Silver Hill storage facility.

5. Station Directories of the Army of the United States for the Continental United States (Washington, January-December 1949).

Atlantic Coast Receiving Branch, U. S. Army Disciplinary Barracks, had been established on the reservation in the summer of 1945.[6]

B. History of the Disciplinary Barracks

1. Its Establishment

On August 1, 1945, the Atlantic Coast Receiving Branch, United States Disciplinary Barracks, was organized at Fort Hancock in accordance with orders from the War Department. It was located at Camp Low, where the stockade would be far enough from post headquarters and the parade ground area to provide necessary isolation, while it was adjacent to the railroad and Hartshorne Drive giving access to the reservation.[7]

2. Its Location, Organization, and Facilities

The stockade was divided into four major compounds (A, B, C, and D) enclosed within double wire fencing. A smaller compound, designated the "400 Area," was enclosed by a single fence. Plans called for housing and messing the prisoners in the four compounds and for classifying them in the "400 Area." No arrangements were made for solitary confinement prisoners, and there were no structures within the stockade suitable for that purpose. It was anticipated that the post guardhouse could be employed for that purpose.

After the first group of prisoners was received, several major changes had to be made to compensate for faulty design. Among these were: installation of double gates and inspection posts at the east and west gates, which controlled access through the stockade by Sheldon

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6. Ibid.

7. F. W. Russell, "Unit History: Branch United States Disciplinary Barracks, 1225th Army Service Unit, Fort Hancock," not paginated, Washington National Records Center (WNRC), Suitland, Maryland, Record Group 338, Posts, Camps and Station Files; Circular No. 230, War Department, July 30, 1945.

Road; and an additional exit gate from Compounds B and D, so that each of the four compounds would have two exit gates.[8]

On December 10, 1945, 100 medium security general prisoners were received from the U. S. Disciplinary Barracks at Green Haven, New York. These people were organized into the stockade "permanent work cadre."

Prior to the cadre's arrival, it was determined that all receiving and processing should be undertaken in C Compound, as it was the central area and more readily accessible to both main gates, recreation areas, etc. Within C Compound, Building T-355 was assigned to the Psychiatry and Sociology Section, with space allotted to the classification boards. Building T-356 served as the reception building, where incoming prisoners were given an orientation talk. Building T-357 was the processing building, where prisoners were marched from the reception building for "strip and search, preliminary medical examination, and issuance of clothing." Building T-358, the identification building, had facilities for photographing and fingerprinting each prisoner. Also located in the latter structure were a room for the Red Cross representative, a consultation room for the chaplain, and an office for the personal affairs officer. The supervisor of prisoners had his office in Building T-361, and T-362 was initially used for storage. Alterations were made to all C Compound structures to facilitate their new missions.[9]

Not long after the first prisoners were received, the Disciplinary Barracks headquarters, in the interest of efficiency, were relocated from the post administration building into the "400 Area's" Buildings T-400, T-401, and T-402. This brought the commandant and his staff into closer personal contact with the facility and prisoners.

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8. Russell, "History: Branch United States Disciplinary Barracks," n.p.; "Fort Hancock Utilities Record Drawings," Sheets 13 and 14, Files, Sandy Hook Unit, Gateway National Recreation Area.

9. Russell, "History: Branch United States Disciplinary Barracks," n.p.

In late February 1946, it became imperative to provide space for the solitary confinement of those prisoners found guilty of gross violations of institution rules. Isolation cells were accordingly introduced into Building T-362 and that structure enclosed by a barbed wire fence, setting it off from C Compound.[10]

To light the stockade, the Corps of Engineers positioned four single pole towers, each equipped with four floodlights, in the center of the stockade; a "series street lighting circuit around the perimeter"; and two 18-inch searchlights mounted on each of the five guard towers. These lights were fed by the post lines.

For emergency lighting, there were three 18-inch portable searchlights with gasoline-powered generators. One of these 18-inch lights was mounted on each of the two gatehouses and the third on a portable platform that could be positioned on a 3/4-ton truck.[11]

There were three recreation areas within the stockade--one west of Buildings T-355, T-359, and T-363; another north of Buildings T-350, T-351, T-352, and T-353; and a third east of Buildings T-342, T-346, T-349, and T-354.

The administrative staff, after moving from post headquarters into the "400 Area," occupied offices in Buildings T-400, T-401, T-402, and T-403. The guard company was quartered in six barracks (T-46 to T-50 and T-190) located between the stockade and the railroad and south of Sheldon Road. South of the barracks was the orderly room, while the guardhouse (T-42) was east of gatehouse 2 and south of structure 99.[12]

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10. Ibid.

11. Ibid.

12. Fort Hancock Utilities Record Drawings, Sheets 13 and 22, Files, Sandy Hook Unit, Gateway National Recreation Area.

The buildings within the stockade served the following functions:

Structure	Use	Compound
T-338	Barracks	B
T-339	Barracks	B
T-340	Barracks	B
T-341	Barracks	B
T-342	Mess Hall	B
T-343	Mess Hall	B
T-344	Latrine	B
T-345	Latrine	B
T-346	Latrine	B
T-347	Latrine	A
T-348	Latrine	A
T-349	Latrine	A
T-350	Barracks	B
T-351	Barracks	A
T-352	Barracks	A
T-353	Barracks	A
T-354	Mess Hall	A
T-355	Psychiatry and Sociology	C
T-356	Reception	C
T-357	Processing	C
T-358	Identification	C
T-359	Latrine	D
T-360	Latrine	D
T-361	Supervisor of Prisoners	C
T-362	Isolation Cells	C
T-363	Barracks	D
T-364	Barracks	D
T-365	Barracks	D
T-366	Mess Hall	D
T-376	Dispensary	

[13]

3. Organization of Administrative Personnel and Guard Companies

Until early October 1945, only a few men were assigned to the Disciplinary Barracks. But, on the 7th, a troop train arrived from Camp Shelby, Mississippi, with 500 enlisted men of the 95th Infantry Division, then being inactivated at the Piney Wood's camp. The newcomers were quartered in the main post area. From then till late

13. Russell, "History: Branch United States Disciplinary Barracks," n.p.

December, these people, along with other troops who reported from time to time, either attended service schools to ready them for the tasks ahead or were employed converting Camp Low into a stockade. Among the schools receiving personnel for specialized training were: the Correctional Custodial Personnel Course, Fort Oglethorpe, Georgia; the Fort Jay, New York, Cooks and Bakers School; and the Rehabilitation Center at Fort Slocum, New York, for training in penal procedures.

Late in November, approximately half the enlisted personnel were organized into the guard company (Captain Thomas J. Lewis, commanding) and removed to the guard barracks just east of the stockade. The remainder of the enlisted men, assigned to the Disciplinary Barracks, were organized into a headquarters company. The latter personnel continued to be housed in the parade ground area. To facilitate the movement of groups of prisoners, a provisional unit, designated the escort company, was formed on December 6. The latter unit was commanded by Captain Harold I. Fiedler.

4. Arrival and Processing of Prisoners

On December 10, two officers and 20 enlisted men were sent to U. S. Disciplinary Barracks, Green Haven, New York, and returned with 100 general prisoners. These people were employed to complete construction of the stockade and to police the area preparatory to arrival of large drafts of prisoners from overseas. On the day after Christmas, the command reached its peak strength, 841 enlisted men.

The barracks began to "function as planned" on December 29-30 and New Year's Day 1946, when three large details of prisoners, numbering respectively 262, 329, and 304, were received from the European Theatre of Operations (ETO). Almost as soon as processing was completed on January 4, 265 general prisoners were escorted to U. S. Disciplinary Barracks, Pine Camp, New York. They were followed one week later by a draft of 317 general prisoners, and, on January 17, by a third draft numbering 276 general prisoners. The movements to Pine Camp were made in heavily guarded troop trains.

Between January 14 and 29, three incoming drafts, totaling 610 general prisoners, reached Fort Hancock from Europe, and the last day of the month saw another troop train carrying 250 prisoners and a 48-man guard depart for Pine Camp. During January, the number of general prisoners in the stockade ranged from a high of 1,018 to a low of 437.[14]

On February 17, to eliminate a duplication of positions, the headquarters and escort companies were merged into a reorganized headquarters company, Captain Fiedler, commanding. Supernumerary enlisted personnel were reassigned to the guard company, and henceforth all escort duties were performed by the guard company.

In the first week of February, 471 general prisoners were received, and, on the first day of March, 719 of these people, having been processed, were escorted to USDB, New Cumberland, Pennsylvania. This, the largest transfer to date, was "handled without any serious operational flaws."

Early in April, another 200 general prisoners were transferred to USDB, New Cumberland, to make room for four large shipments of general prisoners received from overseas in April. Despite many personnel changes during the first four months of 1946, the work of the unit progressed satisfactorily. In this period 250 enlisted men were lost through separation; 31 by transfer to USDB, Green Haven; 83 by transfer to 786th Military Police Battalion, Fort Jay; and 65 men were ordered to the 716th Military Police Battalion, Fort Dix.[15]

5. Military Training Company and Its Mission

On April 6, a military training company was organized under command of Major George O. Miller. This unit was given the

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14. Ibid.

15. Ibid.

mission of training general prisoners on a eight-week cycle with a view of their restoration to duty upon successful completion of the program. Consequently, 147 probationers from the company were sent to Fort Dix in the second week of May for training in handling weapons, for which there were no ranges at Fort Hancock. On June 1, the first 25-man class graduated from the military training company, having completed the eight-week program, and the participants restored to duty.

Class No. 2 graduated on June 23 from the military training company. It consisted of 138 men, who were given 15-day furloughs and then assigned to various stateside organizations. Two more groups of general prisoners were graduated from the military training company in August and placed on furlough pending reassignment orders from the Adjutant General (TAG).[16]

6. Transfers to Federal Prisons

As of the last day of April 1946, discharges and transfers had slashed the strength of the companies assigned to the Disciplinary Barracks to 45 officers and 355 enlisted men. To facilitate transfer of general prisoners, 30 enlisted men were detailed to the command from the 786th Military Police Battalion on May 3. Then, on the 4th, three groups of general prisoners, totaling 151, were sent to federal prisons in Atlanta, Fort Leavenworth, and Terre Haute.[17]

7. Under-Secretary Royall's Visit

Early in May, Under-Secretary of War Kenneth B. Royall, accompanied by Austin H. MacCormick (consultant for the Correction Branch of TAG) and others, spent the day at the facility. Before leaving, they commended Col. Lathrop R. Bullene and his staff on the operation of the U. S. Disciplinary Barracks.[18]

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16. Ibid.

17. Ibid.

18. Ibid.

8. Escapes

On June 6, the headquarters and guard companies were consolidated. Personnel from the former company were relocated from the parade ground area into the Camp Low barracks. This reorganization was effected to "eliminate as much duplication of overhead personnel as possible."

During the late spring and early summer of 1946, the number of escapes and attempted escapes increased. Barracks authorities attributed this to warm weather, making outdoors living conditions more comfortable. In June, three prisoners escaped from a work detail. Then, on July 16, four prisoners fled the confinement ward of the post hospital, stole a truck, and drove it to a point where they waded and swam the Shrewsbury River, coming ashore in Highlands. One of the escapees was recaptured almost immediately within six miles of the post by a roving patrol, and two others turned themselves in on the 17th, when they found their escape routes guarded by military police manning roadblocks.[19]

9. October 18, 1946, Inactivation

Changes downward in the point system for discharge of enlisted personnel resulted in a large number of people being separated from the command in August. To replace them and bring up the organizational strengths, detachments varying in size from a score to 46 joined the guard company during the month from the Harbor Defenses of New York, Fort Wadsworth, Camp Kilmer, and Camp Kilmer Ordnance Depot. This was fortunate because September was a busy month at the barracks, the period from the 12th through the 16th being particularly hectic. On the 12th, 200 general prisoners were shipped to USDB, New Cumberland, to make room for several drafts expected to arrive from the ETO. On the 13th, 300 general prisoners were received and on the 14th, 160 reported. The latter group had been expected in late August, but

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19. Ibid.

machinery failures had plagued the ship returning them to the United States, and the prisoners' arrival was almost without notice. In addition, during this period, 60 prisoners were sent to USDB, Green Haven, 108 were transferred to the federal prison at Lewisburg, Pennsylvania, and 25 dispatched to Fort Jay.[20]

Planning and preparations now began looking toward inactivation of the barracks in late October. On September 30, the last 45 prisoners to enter the stockade for processing arrived from the ETO. During the next 18 days all the inmates were transferred: 221 to the USDB, Camp Gordon, Georgia; 95 to USDB, Fort Knox, Kentucky; and 94 to USDB, New Cumberland. On the 12th, the last 52 men to be graduated from the military training company were given 15-day furloughs and ordered to report to the Overseas Replacement Depot, Camp Stoneman, California. General prisoners on parole status were sent to USDB, Fort Jay, and USDB, Green Haven.

On October 14, 1946, Colonel Bullene, who had been commandant for two weeks less than a year, was transferred to the Fort Leavenworth Disciplinary Barracks. The troops regretted to see him leave, because he had been a popular commanding officer.

During the month, excess gear was turned in, and the stockade emptied, policed, and locked up on October 18. On the 25th, a final muster was held to account for the 26 officers and 287 men carried on the unit's rolls. These people, less a custodial detail of one officer and 25 non-commissioned officers and privates, were then reassigned to the 1225th ASU, Fort Hancock.[21]

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20. Ibid.

21. Ibid.

10. Data on Operating Personnel and Disposition of Prisoners

An examination of the rolls provides certain data on the strength of the force assigned to administer and guard the prisoners, the number of inmates, and their disposition. This information follows:

Operating Personnel Assigned to the USDB, Fort Hancock, consisted of:

Officers	
Total assigned	87
Average strength	34
Peak strength	46
Strength October 20, 1946	27
Total departed before October 20, 1946	60
To separation centers	37
Transferred to other units	17
Assigned-orders revoked	6
Total attended Correctional Custodial Course TAG School, Fort Oglethorpe, Georgia	12
Enlisted Men	
Total assigned	1,740
Average strength	424
Peak strength (December 26, 1945)	841
Strength October 20, 1946	291
Total departed before October 20, 1946	1,449
To separation centers	740
Transferred to other units	709
Total attended Correctional Custodial Course TAG School, Fort Oglethorpe, Georgia	490
From this command	340
From Camp Pickett, Virginia, reporting to this command on completion of course	150
Civilians	
Total assigned	41
Average strength	26
Total personnel assigned	1,868

Disposition of General Prisoners

Transferred to other branches, USDBs	2,780
To USDB, Pine Camp, New York	1,116

To USDB, Green Haven, New York	407
To USDB, New Cumberland, Pennsylvania	920
To USDB, Camp Gordon, Georgia	240
For further disposition (223)	
For military training company (17)	
To USDB, Fort Knox, Kentucky	97
Transferred to jurisdiction other branches USDB	43
While absent sick in hospital	22
While absent on home parole	13
While absent in escape	4
When returned military control from escape	4
Transferred to federal penal institutions	315
Lewisburg, Pennsylvania	178
Chillicothe, Ohio	30
Atlanta, Georgia	33
Terre Haute, Indiana	31
Fort Leavenworth, Kansas	28
El Reno, Oklahoma	8
All other	7
Restored to duty	337
Graduated military training company	323
Direct restoration on authority War Department	6
Direct reinstatement (officers)	2
Restored for purpose of receiving blue discharge	6
Released from confinement	139
Per expiration of sentence	137
Per CDD	2
Dropped from rolls (over 90 days in escape)	10
Grand Total	3,624 [22]

11. Reestablishment of the Disciplinary Barracks

On October 1, 1947, the Branch, U. S. Disciplinary Barracks, was reestablished as a Class 1 activity at Fort Hancock.[23] Efforts to locate documents focusing on the history of the reactivated disciplinary barracks were unsuccessful. Files received at the National Archives and the Washington National Records Center for many Army installations for the years subsequent to 1948 have not been screened and accessioned.

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22. Ibid.

C. Department of Defense Orders Deactivation of Fort Hancock

Time, however, was about to run out for Fort Hancock. The late 1940s continued to be a period of retrenchment for the military, despite the dropping of the iron curtain in eastern Europe, the Berlin air lift, and the Marshall Plan. Louis A. Johnson, secretary of the recently established Department of Defense, pushed grimly ahead with an austerity program that closed bases and stripped the combat effectiveness of military units, particularly those stationed in the Far East.[24]

In December 1949, it was announced by Secretary of the Army Gordon Gray that Fort Hancock was considered as excess to the country's current defense needs. Then, in late January 1950, an Army spokesman declared that on the last day of the month, the disciplinary barracks would close. This would be the first phase in the deactivation program. The media was informed that this process would continue until all Army activity at the once-teaming installation ceased. This would leave only two governmental facilities on the military reservation--the Sandy Hook Coast Guard Station and the 1764 lighthouse.[25]

D. Winding Down Operations

1. News Causes Regrets

To many a former coast artillery man news that Fort Hancock had been declared surplus brought pangs of regret. Besides

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23. General Order No. 6, 1947, Department of the Army, Center of Military History, Department of the Army, Washington D. C.

24. The National Security Act of July 26, 1947, had provided for the unification of the nation's armed forces under a Department of Defense headed by the Secretary of Defense, a cabinet level official. Under the Department of Defense were the Departments of the Army, Navy, and Air Force. The former War Department was redesignated the Department of the Army and the title of the Secretary of War changed to Secretary of the Army with corresponding changes made in other former War Department titles. The Army Almanac: A Book of Facts Concerning the Army of the United States (Washington, 1950), pp. 37-46.

25. New York Times, January 31, 1950, p. 12.

serving its tactical mission with credit, it was recalled by thousands of artillery personnel, both officer and enlisted man, as a "good duty" station, one that was associated with happy memories. This was especially true of many officers, now generals and colonels. These people spoke nostagically of Officers' Row, the Brick House, and their duty at the fort.[26]

2. Discontinuation of Harbor Defenses of New York

Preparatory to implementing this decision, the Department of the Army, on January 3, 1950, had issued a general order announcing the discontinuation of the Harbor Defenses of New York. Fort Hancock would be continued for the time being as a Class 1 installation under jurisdiction of the commanding general, First Army.[27]

3. Times Reporter Tours Sandy Hook

When a New York Times correspondent visited the Hook in late January, he likened the disciplinary barracks to a deserted city, "with all its American soldier prisoners already transferred" to other Army posts. Only five or six prisoners remained, and they had only a few more days to serve to complete their sentences. Colonel James F. Stewart, who had commanded the barracks for more than 24 months, boasted that there had been no escapes.

To illustrate his story, the reporter took a photograph of the disciplinary barracks, showing Corporal William Ward carrying records from the supply building. Looking on were: Captain E. S. Jouber, superintendent; Colonel James Stewart, commandant; and Major Luke P. Light, provost marshal.[28]

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26. Antiaircraft Journal, Vol. 94, No. 6, p. 22.

27. General Order 1, Department of the Army, January 3, 1950, Department of the Army, Center of Military History (CMH), General Reference Branch, Fort Hancock file.

28. New York Times, January 27, 1950, p. 3, and January 31, 1950, p. 12.

Touring the area, the correspondent visited the 4th Echelon Armament Repair Shops, where he saw that the machines and tools were being packed and crated, preparatory for shipment. Supervising this operation was Major Robert E. Johnston, Jr., whose father had been an ordnance sergeant and stationed at the proving ground in the first decade of the 20th century.[29]

4. Colonel Ostrom Retires

Colonel Ostrom, who had commanded the Harbor Defenses of New York and during the retrenchment period Fort Hancock as well, retired on April 30, after more than 40 years' service in the Army. He was succeeded as post commander by Major Johnston. Born at Sandy Hook, Johnston had enlisted in the army in 1906. He had been commissioned a second lieutenant in 1942, and soon thereafter ordered to Fort Hancock for a three-year tour. He had returned to the post in 1946 for a second assignment.[30]

5. Final Weeks

By the end of the third week in April, the task of closing down the post was about 75 percent completed. When questioned by the press, Major Johnston remarked that post activities in recent weeks had been reduced to "phasing out." Truck convoys hauling out equipment and stores were "an everyday sight to the few hundred remaining soldiers."[31]

The number of troops on post by the first day of May had been slashed to a few officers and 40 enlisted men. This small cadre continued the task of closing Fort Hancock. During May and June, army trucks were seen leaving the Hook loaded with records, furniture, and office equipment.

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29. Ibid., January 31, 1950, p. 12.

30. Asbury Park Evening Press, April 23, 1950.

31. Ibid.

6. Fort Hancock Closes

On June 26, 1950, it was announced that the fort would close on Tuesday, the 27th, three days ahead of schedule, whereupon the structures and real estate, excepting the Sandy Hook Coast Guard Station and Lighthouse, would be transferred temporarily to the New York District Engineer. Subsequent plans called for the reservation to be turned over to New Jersey for development as the Sandy Hook State Park.[32]

Captain Joseph Felton, on the 27th, closed his office and departed Sandy Hook for Fort Sill, Oklahoma, his new station. Chief Boatswain Martin J. Hacker of the Coast Guard station lamented the Army's departure, because he and his 30 men, some of whom had families, must now make arrangements to replace services formerly provided by the Army. Among these were transportation. As a temporary expedient, the guardsmen planned to share rides to nearby towns to purchase groceries. The eleven dependent children would have to be pooled to school. The post exchange and commissary had been closed for a number of weeks.[33]

7. Corps of Engineers Take Custody

Captain Raymond Murray of the Corps of Engineers assumed custody of the fort and reservation on behalf of the New York District Engineer at 1 p.m. on the 27th. He planned to remain at the fort for about a month as liaison between the Army and General Services Administration. According to Captain Murray, only two or three of the 30 enlisted men still at the post would remain after the 30th. The Army post office was still in business but would close on the last day of the month; the post exchange had been shut down for more than a week; and the Army switchboard was to cease operation at midnight.[34]

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32. New York Times, June 26, 1950, p. 29.

33. Asbury Park Evening Press, June 27, 1950.

34. Ibid.

Local fishermen holding permits from the Army to fish reservation waters were in a quandary. Many stated that when their permits expired, they would make application for renewals to the New York District Engineer. For years fishing in reservation waters had been prohibited without Army authorization.[35]

Meanwhile, a General Services Administration spokesman had announced that as yet no claim had been advanced by federal agencies to any Sandy Hook acreage with the exception of the navy and coast guard, which expected to maintain the small facilities they already had on the reservation. Colonel Alvin L. Pachynsvi, commanding officer of the Watson Air Force Laboratories, now entered the picture and disclosed that his facility needed to retain a 1,000- by 800-foot tract currently employed as a test station for classified projects.[36]

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35. Ibid.

36. Ibid., June 28, 1950.

II. FORT HANCOCK AND THE KOREAN CONFLICT

A. Fort Hancock is Retained by the Military

1. North Korea Attacks South Korea and the United Nations Respond

On June 25, 1950, 48 hours before Fort Hancock was inactivated, a tragic event occurred, dooming Secretary of Defense Johnson's austerity program. Powerful tank-equipped North Korean columns crossed the 38th parallel and invaded South Korea. A lightning-like advance down the Uijonbu Corridor routed defending forces and led to the early capture of Seoul and the flight of the South Korean government. Meanwhile, on the 27th, the United Nations recommended that its members support the Republic of Korea (South), which it had recognized as the lawful government of that troubled peninsula. United States ground forces stationed in Japan were committed by President Harry S Truman on his own authority as commander-in-chief to fight a delaying action and slow the North Korean steamroller. Reinforcements rushed from the United States and units sent by a number of other United Nations reached South Korea in time to stall the Communist columns along the Pusan perimeter.

United Nations forces seized the initiative on September 15, when units of the Ist Marine Division stormed ashore at Inchon. Seoul was recaptured, and, on October 1, South Korean forces crossed the 38th parallel. They were followed by United Nations forces. The capital of North Korea was occupied on the 19th and, by the first week in November, United Nations troops had closed to within a few miles of the Yalu River border of Red China. On the 5th Chinese troops crossed the frontier and reinforced the battered North Korean army. The tide again turned, and Communist forces, in bitter winter fighting, forged ahead. Seoul was again in the Reds' hands by the end of the year. By mid-January, the North Koreans and Chinese had reached Suwan, Yoju, Wonju, and Kangnung.

The Reds, on February 12, sought to resume the offensive, but after six days their human-wave tactics had been smashed

by United Nations fire and air power. On March 15, 1951, counterattacking United Nations columns retook Seoul. At the end of the month, a patrol from the United States Army crossed the 38th parallel. The Korean Conflict, by mutual consent, soon became a bloody stalemate.

2. Army Determines to Reactiviate Post

On April 20, 1951, three weeks after United Nations forces recrossed the 38th parallel, there was an important meeting involving Fort Hancock's future in the Pentagon office of Under-Secretary of the Army Archibald Alexander. Besides Alexander, those in attendance included five members of the New Jersey congressional delegation and state officials, among them Chairman Wayne D. McMurray of the Sandy Hook Park Commission and Major General I. D. White, chief of staff of the First Army. It was agreed that the Army would reactivate Fort Hancock, while leasing to the state part of the reservation for park purposes. For background data on the state park proposal, the reader should consult Chapter V of this report titled, "The Establishment and Development of Sandy Hook State Park."[1]

Emerging from the meeting, Chairman McMurray told the press that it had been most gratifying

> because of the cooperative spirit shown by the Army in realizing the recreational needs of the people of the metropolitan area of New Jersey. The Army made it clear that there was an urgent defense need for Sandy Hook during the present emergency but did not by any means close the door on the

1. New York Times, April 21, 1951, p. 19. Present at the meeting were these members of the New Jersey congressional delegation: Representatives John C. Auchincloss, Peter W. Rodino, William B. Widnall, Charles R. Howell, and Hugh D. Addonzio, and administrative assistants representing Senators H. Alexander Smith and Robert C. Hendrickson.

ultimate realization of New Jersey's hope for an outstanding park.[2]

An Army spokesman indicated that the Department of Defense would retain about two-thirds of the reservation as a part of the Air Defense System of greater New York City. The rest of the Hook, some 400 acres, would be leased to the state as a seashore park. The remainder of the Fort Hancock reservation, long deemed the principal element in the Harbor Defenses of New York, would be employed for antiaircraft training and defenses.[3]

Two weeks later, on May 3, the Department of the Army issued General Order No. 30, announcing that Fort Hancock had been activated as a Class 1 installation under jurisdiction of the First Army. The effective date was postdated to April 10.[4]

3. Fort Hancock on the Eve of Reactivation

A New York Times reporter visited Sandy Hook, in early May, to learn what had transpired in the ten months since Fort Hancock had been closed. In the intervening months, he learned that the United States Coast Guard "represented the only sign of life" on the Hook, and the men had been referred to as the "loneliest service men on the homefront."

The guardsmen had been left "high and dry" so far as recreation was concerned by the departure of the GIs, and their life had been quite drab. Although within sight of the New York City lights,

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2. Immediate Release, April 20, 1951, Department of Defense, Office of Public Information.

3. New York Times, April 21, 1951, p. 19.

4. General Order 30, Department of the Army, May 3, 1951, Department of the Army, CMH, General Reference Branch, Fort Hancock Files.

guardsmen had to be content with fishing from the quartermaster dock, beachcombing, cards, pool, ping pong, and reading in the station recreation room. "It gives you the creeps," a young guardsman from the Bronx told the correspondent, "it's like a ghost town here."[5]

Though no troops were on post, there were signs that the Army was about to return. Trucks, painted an olive drab, were again seen on the post roads.

When the Army personnel arrived, Chief Boatswain Hacker and his men hoped for an early opening of the post theatre and exchange. Once again, there would be transportation back and forth from the station to the Highlands, and guardsmen could "give their bikes a rest."[6]

The correspondent, rambling about the area, saw buildings, once alive with hundreds of officers and GIs, "standing bare and boarded with weeds overrunning once trim lawns." Among those recognized were the yellow brick administration building, the massive machine shop, the post theatre, St. Mary's Chapel, Officers' Row, and the noncommissioned officers' quarters. In addition to the coast guard personnel manning the Sandy Hook station, the only people residing on the reservation were the lighthouse keeper, his wife, the family dog, and the civilians manning the Fort Hancock fire station.[7]

B. Units and Troops Come and Go

1. First Units Arrive

When the post was reactivated, it would have a dual mission of providing antiaircraft defense for the New York City metropolitan area and serving as a training center for antiaircraft units.

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5. New York Times, May 5, 1951, p. 19.

6. Ibid.

7. Ibid.

By 1951, there was no longer a Coast Artillery Corps. On June 28, 1950, President Truman had signed into law legislation abolishing the coast artillery and field artillery as separate entities and combining them into an artillery branch. Included in the artillery branch would be field artillery and antiaircraft artillery brigades, groups, regiments, and battalions. This reorganization reflected the technological revolution in weaponry, which in the years since World War II had posed a threat to America's major population and industrial centers from high level four-engine bombers.

The first troops arrived on Monday, May 7. On that date, without ceremony or fanfare, Lieutenant Colonel Carl F. Chirico reached Fort Hancock from Fort Dix with the advance echelon of the 41st Antiaircraft Artillery Gun Battalion (90 mm). It was joined before the end of the month by the remainder of the battalion. The 245th Antiaircraft Artillery Gun Battalion (120 mm), New York National Guard, reached the post from Fort Bliss, Texas, at the end of May.[8]

2. The Build-Up

By the end of July, a number of other units had arrived and were stationed at Fort Hancock. The 703d Antiaircraft Artillery Gun Battalion (90 mm), Maine National Guard, arrived from Camp Stewart, Georgia. The 1225th Army Service Unit had been reorganized to provide administrative and logistical support. A medical unit had been organized to staff the post hospital; the 424th Finance Distribution Section had been sent down from Fort Devens, Massachusetts; the 555th Ordnance Integrated Fire Control Replacement Detail had come up from the Aberdeen Proving Ground; and the 354th Signal Radar Maintenance Unit (Type C) from Camp Stewart.[9]

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8. New York Times, May 6, 1951, p. 3, and May 8, 1951, p. 35. Colonel Chirico called Herkimer, New York, home. The 41st Antiaircraft Artillery Gun Battalion had been activated at Fort Bliss on June 8, 1949, as a regular army unit.

9. Station Directories, May-July 1951.

In September, Headquarters and Headquarters Battery, 16th Antiaircraft Artillery Group, reached Sandy Hook from Fort Bliss, and Colonel Fred J. Woods, the group commander, took charge of the post. For Woods, a West Point graduate, it was a homecoming, because he had served as a battery and then a battalion commander in the old 52d Coast Artillery (Railway), while stationed at the Hook in the period 1938-40.[10]

Coincidentally, the 245th Antiaircraft Artillery Gun Battalion, New York National Guard, was transferred from Sandy Hook to Fort Wadsworth.[11]

During the weeks and months following arrival of Colonel Chirico's detachment, a limited rehabilitation program for the buildings and grounds was undertaken under the direction of First Army personnel.[12]

In October 1951, two new units arrived at Fort Hancock. The 369th Antiaircraft Artillery Gun Battalion (90 mm), New York National Guard, came from Camp Edwards, Massachusetts, and the 93d Ordnance Antiaircraft Maintenance Detachment arrived from the Aberdeen Proving Ground.[13]

The number of units stationed at the post increased by three during the winter of 1951-52: the 338th Signal Radar Maintenance Unit (Type C) arrived from Camp Kilmer, New Jersey; the 712th Antiaircraft Artillery Gun Battalion (90 mm) from Camp Stewart; and the

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10. Antiaircraft Journal, Vol. 94, No. 6, p. 22.

11. Station Directories, August-September 1951.

12. Antiaircraft Journal, Vol. 94, No. 6, p. 22.

13. Station Directories, October-November 1951.

96th Ordnance Antiaircraft Maintenance Detachment (TCS) from Fort Devens. The ordnance unit returned to Fort Devens on March 3.[14]

On April 13, 1952, the 703d Antiaircraft Artillery Gun Battalion, Maine National Guard, was released from federal service and reverted to state control. The 703d was replaced at Fort Hancock by the 12th Antiaircraft Artillery Gun Battalion (90 mm), which had been activated at the post on April 8.[15]

Then, on August 10, the 98th Antiaircraft Artillery Gun Battalion (90 mm), Lieutenant Colonel J. J. Kelley commanding, was activated at Sandy Hook. It replaced the 369th Antiaircraft Artillery Gun Battalion, New York National Guard, which was released from federal service and reverted to inactive status on September 10.[16] The 369th was a black unit with a long and honorable history.

In October, the 555th Ordnance Integrated Fire Control Replacement Detail left Fort Hancock for a new assignment at Fort Wadsworth.[17]

There were several changes in command at the post in October. Colonel Clarence H. Schabacker arrived at Sandy Hook and replaced Colonel Woods as commander at Fort Hancock. Woods was reassigned to the Far East Command. On the 15th, Colonel Richard S.

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14. Station Directories, November 1951-March 1952.

15. Station Directory, April 1952; U. S. War Department, Unit Jacket, 133d Engineer Battalion, Organizational History Branch, CMH.

16. Station Directories, June- September 1952; Unit Jacket 369th Artillery, CHM; Antiaircraft Journal, Vol. 95, September-October 1952, p. 43.

17. Station Directories, September-October 1952.

Spangler assumed command of the 16th Antiaircraft Artillery Group, relieving Lieutenant Colonel Gerhard F. Brown.[18]

3. Change of Mission and Retrenchment

In December 1952, four of Fort Hancock's antiaircraft artillery battalions were reassigned to other posts in the greater New York City area. The 41st Antiaircraft Artillery Battalion, at Sandy Hook since May 1951, was sent to Fort Totten. The 12th Antiaircraft Artillery Battalion, at the post since April 1952, was transferred to Miller Field on Staten Island; the 98th Antiaircraft Artillery Battalion, at Sandy Hook since August 1952, had moved to Secaucus, New Jersey; and the 712th Antiaircraft Artillery Battalion, on the reservation since the previous winter, was now at East Rutherford, New Jersey.

As of December 31, 1952, the units stationed at Fort Hancock included:

16th Antiaircraft Artillery Group, Headquarters and Headquarters Battery.
712th Antiaircraft Artillery Gun Battalion (90 mm), less Batteries A, B, and C.
93d Ordnance Antiaircraft Artillery Maintenance Detachment.
338th Signal Radar Maintenance Unit (Type C).
354th Signal Radar Maintenance Unit (Type C).
424th Finance Disbursing Section (less detachment).
1225th Army Service Unit: Station complement.
U. S. Army Infirmary (10-Bed).

In January 1953, the 93d Ordnance Antiaircraft Artillery Maintenance Detachment was ordered to Philadelphia; on March 30, the 424th Finance Disbursing Section to Camp Kilmer; Headquarters and Headquarters Battery, 16th Artillery Group, were inactivated on April 27;

18. Antiaircraft Journal, Vol. 95, September-October 1952, p. 43.

and the 712th Antiaircraft Artillery Gun Battalion (90 mm), less Batteries A, B, C, and D, was released from active duty on the last day of April.

By June 30, 1953, the units asssigned to Fort Hancock had been slashed to:

1225th Army Service Unit: Station complement.
338th Signal Detachment (Radar Maintenance--Type E).
354th Signal Detachment (Radar Maintenance--Type E).
U. S. Army Infirmary (10-Bed).[19]

C. May 1, 1953, Deactivation

The drastic reduction in the number of units stationed at Fort Hancock, which was accompanied by a corresponding decrease in activity at the post, was related to decisions being made at the Pentagon and in the national capital. On January 21, 1953, Dwight D. Eisenhower was inaugurated as 35th president, and he selected Charles E. Wilson, a General Motors executive, as his Secretary of Defense. This led to a reappraisal of defense needs, costs, and priorities.

In Korea, where truce negotiations had been in progress for months while armies battled desperately for a few kilometers on either side of the cease fire line, the situation now seemingly favored an armistice. An agreement had been signed permitting repatriation of seriously sick and wounded prisoners. On April 24, at Panmunjon the first plenary session of the armistice commissioners was held in six months.

Consequently, on March 17, the Department of the Army announced plans to close on June 1 six installations--Fort Hancock; the Army Transmitter Station at Alexandria, Virginia; Fort Custer, Michigan;

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19. Station Directories, November 1952- June 1953; Unit Jacket 16th Artillery Group, CMH.

Fort Huachuca, Arizona; and Forts Warden and Flagler, Washington. This, the army spokesman said, was being done in the name of economy, and would represent a savings of more than six million dollars per year.

These posts, he continued, had been employed during the build-up of the military in the months after the outbreak of the Korean Conflict, but that a "levelling off process" was now underway. Units assigned to these posts would be sent elsewhere.

During the past months, it was pointed out, Fort Hancock's principal mission had been to provide logistical support to antiaircraft units and until December it had served as a base for training antiaircraft battalions.[20] Fort Hancock was accordingly inactivated for the second time in 35 months on May 1, 1953.[21]

This did not mean that the military was abandoning the post. When Fort Hancock was placed on inactive status, the 1225th ASU continued to have the mission of providing logistical and administrative support to the radar and antiaircraft units stationed at Sandy Hook. During the next 36 months, the average post population was 914, of whom 56 were civilian employees.[22]

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20. New York Times, March 18, 1952, p. 13.

21. General Order 30, Department of the Army, May 3, 1953, CMH, General Reference Branch, Fort Hancock Files.

22. Tables of Distribution, Hq., First Army, August 1, 1955, CMH, General Reference Branch, Fort Hancock Files.

III. THE NIKE-AJAX YEARS: 1953-58

A. United States Develops a Surface-to-Air Missile

During the winter of 1944, five months before D-day, the War Department's Antiaircraft Board called for development of a new defense system against high level four-engine bombers, such as were raining death and destruction on population and industrial centers of the Third Reich. It was already apparent that high altitude day and night bombers were difficult targets to bring down with the available conventional tube antiaircraft weapons. The AAA Board called for a missile which could outspeed and outmaneuver any aircraft and destroy the bomber before it reached an effective bomb-release-line, i.e., well away from the defended area.

Although German rocket scientists and technicians had perfected the Wasserfall, a number of years passed before the United States was able to deploy an effective guided surface-to-air missile system for defense of population centers. The development of the NIKE system was spearheaded by German rocketry experts employed and brought to the United States in the months following collapse of the Third Reich.

The task of manufacturing and perfecting components for the Army's first surface-to-air missile was contracted to two of America's industrial giants. Douglas Aircraft Company was reponsible for design of the missile and its launching gear, and Bell Laboratories for designing the computer and electronic components--the brain of the guidance system.

Work on the project was spurred on in September 1949, when President Truman announced that the Soviet Union had exploded an atomic device. Difficulties were encountered and solved in devising and perfecting a missile involving the assembly of more than one and a half million parts. Finally, on November 27, 1951, a NIKE-AJAX scored its

first successful intercept of a drone, a World War II B-17 Flying Fortress.[1]

B. Evolution of ARAACOM (ARADCOM)

Meanwhile, the iron curtain, Berlin blockade, Marshall Plan, etc., had led, even before the outbreak of the Korean Conflict, to a rapid deterioration in relations between the United States and its allies and the Soviet bloc. In 1948, this resulted in a decision by the Pentagon to undertake a rapid expansion of the Army's antiaircraft artillery. In 1949, a number of antiaircraft battalions were ordered to training centers near several metropolitan areas they were expected to protect. Within a few months these units were deployed to the sites they were to defend.

On July 1, 1950, seven days after the outbreak of the Korean Conflict, the Department of the Army established the United States Army Antiaircraft Command (ARAACOM). In 1957, ARAACOM was redesignated United States Army Air Defense Command (ARADCOM). The primary goal of ARAACOM (ARADCOM) was to deter an enemy from undertaking an air assault on the United States by making it aware in advance that its "probable losses" were not worth the risk. If that deterrent failed, the goal was to prevent the "destruction of the centers of America's great retaliatory and productive might." [2]

Then, on September 1, 1954, by direction of Secretary of Defense Wilson elements of all military services with air defense capabilities were combined into a single air defense system, the Continental Air Defense Command (CONAD), directed by the joint chiefs

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1. Nike-Sage Brush, April 1969; Frederick I. Ordway and Mitchell Sharpe, The Rocket Team: From the V-2 to the Saturn Moon Rocket--The Inside Story of How a Small Group of Engineers Changed World History (New York, 1979).

2. Department of Defense News Release, "The United States Air Defense Command," Files, Sandy Hook Unit, Gateway National Recreation Area.

of staff and headquartered in Colorado Springs. In September 1957, the North American Air Defense Command (NORAD) was constituted to combine the air defense capabilities of Canada and the United States under one general-in-chief.

ARADCOM was a major component of NORAD, and the latter had full operational control of the Army air defense forces assigned to continental defense, as well as those forces contributed to this system by the U. S. Air Force Air Defense Command. In the United States, NORAD reported to the joint chiefs of staff, and in Canada to the Chief of Staff Committee.

C. Establishment and Growth of EAAC

Earlier, on September 1, 1950, nine weeks after the invasion of South Korea, the Department of the Army organized the Eastern Army Antiaircraft Command (EAAC). Headquartered at Middleton, New York, EAAC was constituted as the central agency to coordinate air defense activities east of the Mississippi River. EAAC was the Army's element of the joint Eastern Air Defense Force, headquartered at Stewart Air Force Base, New York.

The first major unit to be deployed into EAAC was the 56th Antiaircraft Brigade, activated at Camp Edwards, Massachusetts, in February 1951. In November, the 56th was transferred to Fort Devens and given responsibility for superintending antiaircraft units in the northeastern states.[3]

The next major unit to be assigned to EAAC was the 52d Antiaircraft Brigade. Constituted as Headquarters and Headquarters Battery, 52d Coast Artillery, the 52d had been activated on March 20, 1943, at Camp Edwards, Massachusetts. Two months later, on May 28, the brigade was redesignated the 52d Antiaircraft Artillery Brigade. The

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3. ARADCOM Argus, July 1, 1965.

brigade was ordered overseas in December 1943, sailing from New York City for the British Isles. It landed in Normandy soon after D-Day, and during the next six months participated in the Normandy, Northern France, Rhineland, and Ardennes-Alsace Campaigns. The unit was cited for its action in the defense of Liege and the Meuse River area. It was awarded the Belgian forragere by the Belgium government for its role in these actions. The 52d Brigade returned to the United States in November 1945 and was inactivated at Camp Shanks, New York. On June 13, 1952, the brigade was reactivated at Fort Wadsworth, New York, and assigned the mission of defending the greater New York metropolitan area against air attack.[4]

In the summer of 1954, EAAC was reorganized as the First Regional Antiaircraft Command, and its zone of responsibility circumscribed to be coextensive with that of the First Army, less the Niagara-Buffalo complex. First Regional Command's administrative units were headquartered at Fort Totten. Coincidentally, the major elements assigned to the First Region were: the 56th Antiaircraft Brigade, the holding unit for regional command headquarters personnel; the 52d Antiaircraft Brigade and 80th Antiaircraft Group charged with the defense of greater New York City against aerial attack; and the Boston Defense, which included the 15th Antiaircraft Group.

The 23d Antiaircraft Group joined the 52d Antiaircraft Brigade in 1956 with responsibility for those elements of the New York defense east of the Hudson. In July of that year, the 56th Antiaircraft Brigade transferred from Fort Totten to Fort Devens to assume responsibility for the Boston-Providence defense. In September 1956, the First Region assumed responsibility for defense of the Thule Air Base in Greenland.[5]

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4. Nike-Sage Brush, May 1969; Unit Jacket, 52d Artillery Brigade (Air Defense), CMH.

5. ARADCOM Argus, July 1, 1965.

ARADCOM's Eastern Defense Force, until the last day of December 1959, was headquartered at Stewart Air Force Base, Newburgh, New York. Its administrative functions as of that date were shifted to ARADCOM's Colorado Springs headquarters. This change, it was argued, would accelerate the identification and reporting of enemy bombers or missiles. Stewart Air Force Base continued to be headquarters for the Boston Air Defense Sector, whose jurisdiction included the Texas Towers anchored off the Atlantic Coast, and the 329th Fighter Group.[6]

D. The NIKE-AJAX System Becomes Operational

1. Secretary Stevens March 27, 1953, Press Conference

On March 27, 1953, Secretary of the Army Robert Stevens held a press conference at the Pentagon to announce that measures would be inaugurated during the summer to introduce a new weapons system aimed at protecting large metropolitan areas and industrial centers against air attacks. The system's core was a guided missile capable of seeking out and destroying an enemy bomber 30 miles from the launching site.

The guided missile batteries, the secretary continued, would be armed with the NIKE, a ground-to-air missile then in quantity production for which personnel were being trained at the Fort Bliss Guided Missile Center and the White Sands Proving Ground. The missile was named for Nike, the Greek goddess of victory. One of the numerous rockets under development in the years since V-E Day, the NIKE was considered the best rocket in the nation's arsenal for the mission of intercepting hostile bombers approaching targets at high altitudes. It would be teamed with the Skysweeper, the Army's rapid-fire, radar-controlled 75 mm gun, capable of firing 75 shells a minute at low flying airplanes.

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6. New York Times, February 19, 1959, p. 34. The Eastern Defense Force was responsible for coordinating defense against attack from the air for 28 states, extending from Maine to Florida.

Secretary Stevens and other Army spokesmen, when questioned, declined to reveal details of the NIKE's performance. They pointed out, however, that it had been impressive in its rate of kills against targets. A number of drones, radio controlled B-17s, although undertaking evasive maneuvers had been brought down by the NIKE's explosive warhead.

Army air defense experts, while making no extravagant claims for the effectiveness of the NIKE, welcomed its addition to their arsenal, which included radar, early warning networks, conventional antiaircraft guns, and jet interceptors. Secretary Stevens termed it the best antiaircraft weapon then available. But, he added, research and development were continuing on other types of rocketry with different kinds of target seeking gear.

Turning next to NIKE's deployment, a departmental spokesman noted that, to be placed in battery, the NIKE would require a cleared area near the launchers. This area, without structures and improvements, was needed to provide space into which the rocket take-off assisted "bottles" would fall on expending themselves a few seconds after the missile had been launched.

The NIKE, it was explained, carried its own guidance system. It was an electrical honing device by which the missile initially aimed toward the target maneuvered to compensate for the attacking aircraft's evasive tactics. The Army refused to disclose the height to which the NIKE could be fired, but raised no objection when the figure 30 miles was mentioned.[7]

2. Army Moves to Activate System

By mid-May, the Corps of Engineers was buying land around a number of major cities for the development of NIKE sites. The

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7. Ibid., March 28, 1953, p. 10.

list of cities was classified, but Niagara Falls, with its vital hydroelectric power facilities, was known to be included. In addition to a large cleared area, it was now known that another prerequisite for a NIKE site was space for a radar station to guide the missiles. Inasmuch as possible, the Army planned to employ land already owned by the United States for development of NIKE sites. This would help hold down costs.[8]

Within several weeks, the Army released additional details of its program to position its NIKE sites, some of which would be underground. The ground control guidance equipment for a NIKE site would be located in a 6- to 8-acre plot--the Control Area--which would include, three radars and a computer. The first, an acquisition or search radar, would detect the approach of distant aircraft. Once a target was selected, a second or tracking radar would pick it up and feed data regarding its location and movement into the computer. The third radar, the missile tracking radar, would follow the missile throughout its flight, reporting its movements to the computer. The computer instantaneously and continuously thereafter would calculate the closest point of intercept between the missile and target and direct the missile toward the target.

A Launcher Area would be sited one to four miles from the Control Area. It would consist of approximately 42 acres, of which 15 acres were required for the operating facilities and the remainder as a surrounding safety or buffer zone. The principal elements found within the Launcher Area would be: underground storage magazines, launchers, missile assembly building, fueling area, control van, generators, administration and housing facilities, and appurtenant utilities. Troop housing would be generally located at either the Launcher or Control Area but in some places could be divided between the two areas. Plans called for six underground storage magazines per battery.[9]

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8. Ibid., May 16, 1953, p. 21.

9. Steven Malevich, "Nike Deployment," The Military Engineer, Vol. 47, November-December 1955, p. 417.

3. Delays Cause a Revamping of Schedule

On Saturday, September 26, the Army announced that it had failed to meet its target date for deployment of its first NIKE battalion. As of today, the spokesman told the press, no NIKE unit is ready to resist a surprise attack. We were too optimistic, he added. Officials, however, were confident that elements of the NIKE system would be ready for action before December.[10]

4. ARAACOM's Training Program

Initial training for ARAACOM guided missile technicians varied from eight weeks for radar operators to nearly a year for maintenance and repair specialists. The schools were at the Fort Bliss Army Air Defense Center. There officers and enlisted personnel participated in courses covering the entire spectrum of the antiaircraft guided missile system, after which selected people were given additional instruction to enable them to specialize in one phase of operations or a single piece of equipment.[11]

At this period conditions at the training center were primitive. NIKE rails were above ground--there were no pits or elevators. Liquid propellents were employed, and crews wore heavy and cumbersome acid-proof protective outfits and were hosed down after each fueling operation. Fueling and war-heading areas were separated and isolated by berms--crude parapets constructed by piled up sand-filled 55-gallon drums. Dirt lanes connected the battery compounds.[12]

Fort Bliss training featured the cadre or "package" battalion approach. Each "package," numbering about 150 officers and

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10. New York Times, September 27, 1953, p. 19.

11. "ARADCOM Fact Sheets (Training for ARADCOM and Missile Firing Practices)," Files, Sandy Hook Unit, Gateway National Recreation Area.

12. "Began with Guns, Using 70 mm/quad-50 mm, and 75 mm Skysweepers," Files, Sandy Hook Unit, Gateway National Recreation Area.

men, rounded out its training by firing a series of missiles at New Mexico's McGregor Range. The equipment employed to fire the missiles was taken with the package batteries back to their defensive installations. An eight-week cycle was required for necessary training to convert a NIKE-AJAX battery into a NIKE-HERCULES firing unit.

The Fort Bliss school and McGregor firing range were but the first step. While on duty at the tactical sites, ARAACOM men continued to be schooled in maintenance, repair, and operation. In addition, beginning in 1955, each firing unit returned to McGregor annually to fire several missiles each. Results of these "shoots," in which drone targets were employed, were scored and critiqued by a team to insure that firing units were maintained at peak efficiency and were always combat-ready.[13]

The first battery of Army troops to be trained in the employment of the NIKE-AJAX fired a surface-to-air missile at the Red Canyon Range on October 28, 1953.[14]

5. First Battery Site Becomes Operational

Another seven months passed, however, before the Army placed in operation, on 24-hour alert, a NIKE-AJAX guided missile battery at Lorton, Virginia. This was more than eight months after the date originally forecast.

This unit became the cornerstone of a nationwide Army Defense Command Structure which soon embraced most of the country's population and industrial centers. As additional NIKE-AJAX units were deployed, the Pentagon announced in November 1955 that the number of

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13. ARADCOM Fact Sheets (Training for ARADCOM and Missile Firing Practices), Files, Sandy Hook Unit, Gateway National Recreation Area.

14. Nike-Sage Brush, April 1969.

missile batteries exceeded the number of conventional antiaircraft gun batteries. As of that date there were 140 NIKE batteries and 132 gun batteries.[15]

E. Construction History of NIKE Site

1. The Announcement

Meanwhile, in November 1953, it had been reported by the Department of the Army that preliminary planning for construction of a NIKE site at Sandy Hook was being held in abeyance. Although the plan had not been shelved, the extent and scope of the project was being reevaluated before construction began. It was believed that this review had been instigated by Governor Alfred E. Driscoll and those New Jersey officials, who were pressing the Army to deed to the state the southern half of Sandy Hook for development as a recreational park.[16]

The Army soon decided to proceed. On December 15, 1953, the Pentagon released information that work would soon be started on a $1,500,000 antiaircraft installation at Fort Hancock. The Army spokesman, however, declined to confirm reports that the facility would be armed with NIKE missiles. He did say, however, that bids would be advertised in the near future and construction was expected to commence in February.[17]

2. Preparation and Approval of Plans and Drawings

a. Staff Plans and Decisions

Army Corps of Engineers representatives, who would be responsible for design and construction of the NIKE sites, were officially introduced to the system in May 1952. At Army meetings,

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15. Ibid.

16. New York Times, November 4, 1953, p. 14.

17. Ibid., December 15, 1953, p. 2.

optimistic reports were heard as to the weapon's capabilities and status of development, and preliminary planning of facilities for its deployment began.

Initially, it was contemplated that the missile would be assembled at a central point within a defense area, and then distributed by trailer to the various firing batteries and placed on dispersed above-ground launcher racks. A battery was deemed to be semi-mobile, capable of being moved from place to place and set up for firing in a relatively short time. This concept was abandoned, however, when it was realized that a fixed-type installation, including on-site living quarters for personnel, was needed to keep the weapon ready for instantaneous action.

A study of the control and firing systems was undertaken jointly by the Corps of Engineers, the Army General Staff, the Ordnance Department, ARAACOM, and the weapon's developers, and from it design criteria were evolved. An architect-engineer contract was then awarded to Leon Chatelain, Jr., of Washington, D. C., by the Chief Engineer. Leon Chatelain, Jr., was to prepare standard plans of typical battery installations. Design directives, accompanied by siting criteria and preliminary copies of standard plans, were issued in April 1953.[18]

In some congested areas, such as the Chicago lake-front, sufficient land for construction of typical above-ground dispersed installations probably would not be available. Consequently, design engineers proposed and developed an underground missile storage magazine, equipped with a hydraulic elevator, which could transport the missile to ground level for launching. A prototype was constructed at White Sands Proving Ground in June 1953. Firing tests off the platform proved the design to be practical. With incorporation of such improvements as were dictated by these tests, the architect-engineer

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18. Malevich, "Nike Deployment," Military Engineer, Vol. 47, p. 418.

prepared contractor project drawings of an underground installation. This provided a solution to the site problem in congested areas by minimizing the amount of land required.

The success of the design and procedures worked out by the Corps of Engineers for underground storage of the missiles made it possible for the Department of the Army on October 28, 1953, to direct that henceforth underground magazines be employed as a general rule--thus minimizing the disruptive effects upon the civilian economy and community interests. This plan reduced the land requirement at a Launcher Area from the 103 acres needed for the above-ground dispersed layout to about 40 acres. The siting problem was thus eased to a considerable extent, but the design had to be started over again by architect-engineer contractor Leon Chatelain, Jr. A number of other changes were agreed upon under this new plan. The missile launcher on the elevator was to be supplemented by above-ground satellite launchers, which by use of the elevator were to be loaded from the underground storage and erected to firing positions during the alert period. Counting the missile on the elevator, four missiles per magazine could be made ready for firing prior to an engagement instead of one missile under the previous system. The original concept of a central battalion missile assembly area was abandoned; missiles were now to be assembled at the batteries and armed below ground in the storage magazines. The scheme as finally adopted provided noteworthy improvements in operating conditions and made available a larger reserve of ready missiles.[19]

b. Plans by Leon Chatelain, Jr., for Many Structures

The Leon Chatelain, Jr., plans, which included the following drawings, were reviewed and approved by the Chief Engineer's office in the period from June 1953 to July 1954:

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19. Ibid., p. 419.

NIKE 1--Fort Hancock, Sandy Hook, New Jersey
Drawing No. ME 16-06-196
File No. 6171-801
Date January 22, 1954
Sheet One
1. Launching Area, Control Area

NIKE 1--Generator Building Battery--Building T-429
Launching Area, Plans, Elevations, and Sections
Drawing No. ME 26-03-40
File Nos. 6171-821/23
Date January 22, 1953
Sheets Three
1. Plans and Elevation and Sections
2. Details and Wall Sections
3. Electrical and Mechanical

NIKE 1--Battery--Launching Area Type "B"
Drawing No. ME 16-06-196
File No. 6171-820
Date January 22, 1954
Sheets Three

NIKE 1--Latrine (Type C)--Building 434
Launching and Control Areas, Plans, Elevations, and Sections
Drawing No. ME 38-03-18
File Nos. 6171-812/14
Date June 1, 1953
Sheets Three
1. Latrine Elevations and Plans
2. Details
3. Plumbing and Electrical

NIKE 1--Underground Missile Storage Structure--Type "B"
Drawing No. ME 33-15-20
File Nos. 6171-824/38
Date December 23, 1953
Sheets Fifteen
1. Plans
2. Sections
3. Foundation Plan
4. Framing Plan
5. Sections
6. Details
7. Plumbing and Heating
8. Electrical
9. Top Frame Assembly and Details
10. Door Assembly and Details
11. Locking Door Details
12. Platform
13. Equalizer and Assembly Details

14. Cylinder Assembly
15. Power Unit

NIKE 1--Acid Storage Shed--Building 401
Drawing No. ME 78-20-02
File Nos. 6171-843
Date January 23, 1954
Sheet One

NIKE 1--Missile Assembly and Test Building (T-449)
Drawing No. 35-60-08
File Nos. 6171-839/42
Date January 22, 1954
Sheets Four
1. Plans and Elevations
2. Details
3. Plumbing and Heating
4. Electrical

*NIKE 1--Warhead Installation Building
Drawing No. ME 33-38-01
Date June 2, 1953
Sheets Four
1. Plans, Elevations, and Sections
2. Wall Details
3. Roof Framing Plans and Details
4. Heating and Electrical

*NIKE 1--J. P. Fueling Platform
Drawing No. ME 36-40-16
Date June 2, 1953
Sheets One
1. Plans and Details

*NIKE 1--Acid Fueling Platform
Drawing No. ME 36-40-17
Date June 2, 1953
Sheets One
1. Plans and Details

*NIKE 1--Battery Launching Area--Type "B"
Four Launchers--Underground
Drawing No. ME 16-06-198
Date June 2, 1953
Sheets Three
1. Title Sheet
2. Typical Layout-Diagram
3. Road and Paving Details

*NIKE 1--Battery Launching Area--Type "B"
Drawing No. ME 71-03-10
Date June 2, 1953
Sheet One

1. Electrical Distribution System

*NIKE 1--Magazine--Warhead Storage
Drawing No. ME 33-15-16
Date June 2, 1953
Sheets Three
1. Plans and Elevations
2. Wall Details
3. Details

*NIKE 1--Magazine--Ready Missile
Drawing No. ME 33-15-17
Date June 2, 1953
Sheets Five
1. Plans, Elevations, and Sections
2. Details
3. Foundation Plan and Details
4. Roof Framing Plan and Detail
5. Electrical

*Modified Emergency Construction, Special AAA
Drawing No. 36-03-02
Date July 7, 1954
Sheets One
1. Tower Acquisition Radar

*Modified Emergency Construction, Special AAA
Drawing No. 35-03-03
Date June 18, 1954
Sheets One
1. Tower Tracking Radar[20]

In addition, Leon Chatelain, Jr., prepared drawings for Type "A," nine launchers underground; Type "C," twelve launchers revetted; Type "F," six launchers underground; and Type "G," six launchers underground, for the Corps of Engineers.

c. Plans by Bowen and Barbalat for Fencing

Bowen and Barbalat of Pittsburgh prepared plans for the chain-link security fencing to enclose the missile launching and tracking sites. The plan was titled:

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20. The sets of drawings marked by an asterisk are on file at John S. Samperton Associated, a successor to Leon Chatelain, Jr., at 1635 K Street, NW, Washington, D. C. Copies of the other Leon Chatelain drawings cited are on file at the Sandy Hook Unit, Gateway National Recreation Area.

"Plans for 'H' Column Posts for Chain Link Fences and Extension Arms for 3 Strands of Barbed Wire."
Drawing No. E 40-16-06
File No. 7620-3562
Date July 2, 1953
Sheets One[21]

d. Plans by Beall and Lemay for Missile Tracking Site Structures

In 1960, the Office, Chief of Engineers, contracted with Beall and Lemay of Washington, D. C., Structural Engineers, for three sets of drawings of existing structures at the missile tracking site. These drawings were:

Existing Towers and Ground Mounts with Radomes--Missile Tracking Radar (Structures 419 and 422)
Drawing No. 35-03-52
File Nos. 7620-356/62
Date July 15, 1960
Sheets Six
1. Schedule of Drawings
2. Radome Anchorage Details
3. Sections and Details
4. Sections and Details
5. Sections and Details
6. Sections and Details

Existing Towers and Ground Mounts with Radomes--Acquisition Radar (Structures 418 and 421)
Drawing No. 35-03-53
File Nos. 7620-3552/55
Date July 15, 1960
Sheets Four
1. Schedule of Drawings
2. Anchorage Details
3. Mounting Platform Details
4. Details

Existing Towers and Ground Mounts with Radomes--Tracking Radar (Structures 417 and 420)
Drawing No. 35-03-54
File Nos. 7620-3556/61

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21. A copy of the subject plan is on file at the Sandy Hook Unit, Gateway National Recreation Area.

Date July 15, 1960
Sheets Six
1. Schedule of Drawings
2. Anchorage Details
3. Details and Sections
4. Electrical System Diagrams
5. Platform Plan and Elevations
6. Details[22]

e. Plans by Spector and Montgomery for Structures 437 and 449

Spector and Montgomery, Architect-Engineers, of Falls Church, Virginia, prepared final plans for the Corps of Engineers for several Fort Hancock NIKE site structures. The first set, approved June 18, 1956, and revised April 19, 1961, was for a ready building (437) erected under contract in 1964.[23] A second set of drawings, approved August 14, 1958, were for a missile assembly and test building (449), constructed in 1959 in conjunction with introduction of the NIKE-HERCULES system.[24] Spector and Montgomery also prepared drawings for chain link fencing and a swing gate for the site.[25]

f. Plans by Diegart and Yerkes for HIPAR System

The Chief Engineer contracted to Diegart and Yerkes of Washington, D. C., preparation of working drawings for the HIPAR building and acquisition radar tower. The former was submitted on June 10 and the latter on July 27, 1960. These plans were:

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22. Personal interview, Beall and Lemay personnel with Edwin C. Bearss, August 8 and 11, 1980. Copies of the subject plans are on file at the Sandy Hook Unit, Gateway National Recreation Area.

23. Plan "Modified Emergency Construction, Special AAA, Ready Building," Drawing No. 30-11-10, File No. 7620-4778, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

24. Plan "Missile Assembly and Test Building," Drawing No. 35-60-29, File No. 7620-2991, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

25. "Fence and Details, Type FE-5, FE-6, FE-7," March 15, 1961, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

Improved NIKE-HERCULES System, HIPAR
Building 468
Drawing No. 26-27-01
File Nos. 7610-3523/34
Date June 10, 1960
Sheets Nineteen

1. Schedule
2. Plans and Elevations
3. Trench Layout
4. Section and Details
10. Wall Sections
12. Penthouse and Trench Details
14. Miscellaneous Details
15. Door Details
16. Waveguard Supports
17. Plumbing
18. Air Conditioning
19. Electrical

Improved NIKE-HERCULES System, HIPAR Acquisition Radar Tower
Building 469
Drawing No. 35-03-56
File Nos. 7620-3535/45
Date July 27, 1960
Sheets Eleven

1. Schedule
2. Foundation Plan--CONUS Tower
3. Foundation Plan
4. Plans and Details
5. CONUS Platform Details
6. Extension--Plans and Details
7. Extension Details
8. Tripod Erection Diagram
9. CONUS Platform--Electrical Circuits
10. Radome Erection Diagram--Part 1
11. Radome Erection Diagram--Part 2[26]

3. Plans Updated and Contract(s) Awarded

The site plan for the launching area was prepared by Alexander D. Crossett and Associates, Architect-Engineer, of New York City, and approved by the New York District Engineer on March 22, 1954. Coincidentally, the Leon Chatelain, Jr., plans were revised and

26. Copies of the subject plans are on file at the Sandy Hook Unit, Gateway National Recreation Area.

updated by the New York firm to conform to the site plan. With all the drawings and specifications in order and money available, the New York District Engineer called for proposals, and contracts were awarded for construction of the Sandy Hook launching and tracking area sites.[27]

Technically, the engineering and construction problems were not, in themselves, very difficult or unusual. The work was done by lump-sum contract with a normal 30-day period of advertising, public bid openings, and award to the lowest responsible bidder. Construction time averaged eight to nine months. Generators, frequency convertors, and elevators were procured centrally by the Corps of Engineer's Chicago Procurement Office, and were provided as government-furnished materials to the contractor. Had time permitted, it would have been preferable to erect and service-test the elevators prior to mass production. This would have accelerated acceptance testing and eliminated the time-consuming modifications and adjustments that were required. Tight scheduling, designed to make the sites operational as rapidly as possible, mandated incremental contracting and construction in certain circumstances, i.e., magazines were started before housing plans were finalized. Although this increased the administrative burden on the contracting officer, it was more economical than if the construction had been undertaken on a cost-plus-a-fixed-fee basis.[28]

4. First Army Makes Announcement

Meanwhile, on March 1, 1954, two months before the Lorton, Virginia, site became operational, Lieutenant General Withers A. Burress informed the public that NIKE guided missiles would soon be a

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27. Efforts to locate copies of the construction contracts and related documents have been unsuccessful. The New York District Engineer's Office disposes of this type of paperwork after six years. Telephone interview, Margaret Singer with Edwin C. Bearss, August 5, 1980. Ms. Singer is with the Records Management Division of the New York District Engineer.

28. Malevich, "NIKE Deployment," Military Engineer, Vol. 47, pp. 419-20.

part of the New York City antiaircraft defenses. This supersonic missile, the general observed, would give the metropolitan area a far greater degree of air defense than was possible with the more limited ranges and characteristics of conventional antiaircraft weaponry. The guided surface-to-air missile sites in the greater New York area, General Burress announced, would be commanded by Colonel Richard S. Spangler, commanding officer of the 52d Antiaircraft Artillery Brigade (Static), headquartered at Fort Wadsworth.[29]

5. Construction Information and Date of Acceptance

On April 13, 1955, the contractor completed at Fort Hancock and the Corps of Engineers accepted these NIKE system structures:

Missile Tracking Site

No.	Designation	Capacity	Dimensions	Cost
T 401	Acid Storage Shed			
T 402	Barracks	13 men	20' 10" x 48' 10"	$12,600
T 403	Barracks	13 men	20' 10" x 48' 10"	12,600
T 404	Barracks	13 men	20' 10" x 48' 10"	12,600
T 405	Barracks	13 men	20' 10" x 48' 10"	12,600
T 406	Latrine		18' 8" x 37' 4"	11,000
T 407	Boiler House		10' x 12'	300

Missile Launching Site

No.	Designation	Capacity	Dimensions	Cost
425	Missile launch storage		51' x 62'	
426	Missile launch storage		51' x 62'	
427	Missile launch storage		51' x 62'	
428	Missile launch storage		51' x 62'	
T 430	Barracks	13 men	20' 10" x 48' 10"	$12,600
T 431	Barracks	13 men	20' 10" x 48' 10"	12,600

29. New York Times, March 2, 1954, p. 15.

T 432	Barracks	13 men	20' 10" x 48' 10"	12,600
T 433	Barracks	13 men	20' 10" x 48' 10"	12,600
434	Latrine		18' 8" x 33' 4"	11,000
T 435	Boiler House		8' x 12'	300[30]

The next contract let by the New York District Engineer was for structures at the missile tracking site, and it was completed and the structures accepted on May 21, 1956. Involved were:

No.	Designation	Dimensions	Cost
409	Interr. corridor and control vans	12' 4" x 21' 4" and two 6' x 7' 4" wings	$30,000
410	Generator house		
411	Interr. corridor and control vans	12' 4" x 21' 4" and two 6' x 7' 4" wings	30,000
414	Generator house		
417	Target tracking radar	22' x 34' foundation	32,468
418	Acquisition radar	22' x 21' foundation	51,860
419	Missile tracking radar	22' x 34' foundation	32,468
420	Target tracking radar	22' x 34' foundation	32,468
421	Acquisition radar	22' x 21' foundation	51,860
422	Missile tracking radar	22' x 34' foundation	32,768[31]

In 1958 and 1959, a number of structures were constructed under contract at both the tracking and launching sites. They were:

Missile Tracking Site

No.	Designation	Dimensions	Cost	Date Accepted
413	Sentry box	5' 4" x 8' 6"	$2,312	9/58
423	Sentry box	5' 4" x 8' 6"	2,312	9/58

30. Real Property Record Cards, Structures T402-07, 425-28, and T430-33, 434 and T435, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

31. Real Property Record Cards, Structures 409-11 and 414-22, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

Missile Launching Site

	No.	Designation	Dimensions	Cost	Date Accepted
	424	Sentry box	5' 4" x 8' 6"	$2,312	9/58
T	429	Generator building	20' x 58' 4"	21,250	12/1/58
	447	Flammable materials storehouse	7' 4" x 7' 4"	1,297	12/59
	448	Ground fence gate guard tower	10' x 8'	5,128	12/19/58
	449	Missile assembly test building	39' 4" x 40'	29,000	4/59
	450	Warhead building	20' x 39' 4"	31,456	8/3/59
T	458	Canine kennel	3' 7" x 5' 10"	3,600	12/19/58[32]

During 1960 and 1961, additional improvements were made to the missile tracking site to accommodate the more sophisticated gear required by the NIKE-HERCULES systems. These improvements included:

No.	Designation	Dimensions	Cost	Date Accepted
451	Pedestal radar tower	8' x 9'	$1,300	2/1/60
452	Equipment and operations building	20' 10" x 20' 10"	2,900	2/1/60
453	Pedestal radar tower	8' x 9'	1,300	2/1/60
454	Equipment and operations building	20' 10" x 20' 10"	2,900	2/1/60
455	Tool shed	5' 11" x 9'	1,000	6/1/60
467	Target ranging radar		28,650	4/28/61[33]

32. Real Property Record Cards, Structures 413, 423-24, T429, 447-50, and T458, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

33. Real Property Record Cards, Structures 451-55 and 467, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

Meanwhile, these structures had been added to the missile launching site:

No.	Designation	Dimensions	Cost	Date Accepted
456	Guard shelter	6' 3" x 7'	$ 100	8/1/60
457	Storage (general)	6' x 8'	1,000	6/15/60
T 459	Air conditioner[34]			
T 460	Air conditioner			

Installation of the High Power Acquisition Radar (HIPAR) in 1962 resulted in the addition of these improvements to the missile tracking site:

No.	Designation	Dimensions	Cost	Date Accepted
468	HIPAR building	34' x 50'	$58,796	11/30/62
469	HIPAR tower		7,800	11/30/62
472	HIPAR target tracking radar	170 sq. ft.	23,361	11/30/62
473	HIPAR target tracking radar	170 sq. ft.	18,066	11/30/62[35]

In 1964, a ready building (439) was erected at the missile launching site. The 60' by 32' 4" reinforced concrete structure was built at a cost of $33,700.[36]

6. Improvements Made by Post Engineer

During the late 1950s and early 1960s, the Fort Hancock engineer and his staff made improvements to certain of the missile launching and tracking site structures. A number of these had to do

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34. Real Property Record Cards, Structures 456-57 and T459-60, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

35. Real Property Record Cards, Structures 468-69 and 472-73, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

36. Real Property Record Cards, Structure 437, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

with radomes. The radome had been developed by the U. S. Air Force, in cooperation with the Firestone of Canada Corp. A balloon-like dome, these shelters, some as large as 60 feet in diameter, had been designed for use at Arctic and other air defense radar installations to protect radar antennas from foul weather.

Radomes were constructed of panels of treated nylon fabric zipped together on the inside. Steel clips were fastened to the exterior seams to make an airtight seal. The assembled radome was then attached to an anchored base and inflated by automatic blowers that regulated the pressure to provide a uniform shape. Radomes were able to withstand 100-mile-an-hour gales without collapsing. Other assets were their mobility, while the zippered panels permitted repairs to be made promptly by replacing damaged sections rather than the entire balloon.[37]

Radomes, in view of the foul weather and fierce seasonal gales of Sandy Hook, were secured in the late 1950s and positioned at the Fort Hancock missile tracking site. In March 1966, workmen positioned and inflated new radomes over the structures supporting the missile tracking radar (Building 422), the target ranging radar (Building 467), and the target tracking radars (Buildings 472 and 473).[38]

Then, in September 1967, workmen positioned heated ladders at the acquisition radar (structure 421) and the missile tracking radar (structure 422).[39]

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37. New York Times, February 14, 1957, p. 14.

38. Real Property Record Cards, Structures 422, 467, 472, and 473, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

39. Real Property Record Cards, Structures 421 and 422, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

In March 1968, workmen remodeled the arms room in barracks T433. The cost of this project was $1,737.06.[40]

F. Fort Hancock's July 1, 1956, Reactivation

1. Decision Announcement

The construction of the missile launching and tracking facilities at Sandy Hook and the increased importance given by the Defense Department to the NIKE-AJAX system in defense of metropolitan centers led to a decision by the Pentagon to change Fort Hancock's status. On January 3, 1956, it was announced that the post would be reactivated on July 1. When it reopened, the post would be assigned to the First Army.[41]

2. Army Documents the Need

Despite this announcement, New Jersey authorities still hoped that the miltary would make available to the state a portion of the Hook for development of a recreational park. These hopes were dashed for the time being by Secretary of the Army Stevens on May 20, when he told the press that Fort Hancock would be retained for defense of the New York City area. Although he did not go beyond noting that the "narrow spit was needed for defenses, authoritative sources said the area had been declared ideally suited for setting up a Nike guided missile battalion."

In March, the Army had disclosed that the NIKE's performance had "proved sufficient and production of weapons" had reached the point where batteries were being deployed around major population and industrial centers.[42] An Army spokesman, when

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40. Real Property Record Cards, Building T433, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

41. New York Times, January 4, 1956, p. 13; General Order 68, Department of the Army, December 22, 1955, CMH.

42. New York Times, May 21, 1956, pp. 4, 21.

questioned, remarked that he would not pinpoint projected NIKE sites "no matter how visible or apparent they might become" to people watching their placement. NIKE missiles, he continued, posed a particular problem inasmuch as sites were concerned. When a NIKE-AJAX lifted off the ground, the rocket engine was assisted by powerful boosters that gave it a thrust to gain altitude and speed before its own propulson unit took control. At a point a few seconds after the lift off, the booster charges, having expended their energy, dropped away from the missile. The Army therefore was positioning the NIKE sites so that the booster charges would drop into uninhabited areas. This had created a problem in the selection of NIKE sites, because they must be positioned close to built-up areas where land was at a premium. Several estimates had placed at 120 acres the minimum site needed for setting up a NIKE battery with proper "fall-off" area.[43]

3. New Jersey Acquiesces

New Jersey's Third District Congressional Representative Auchincloss, commenting on Secretary Stevens' statements, announced that the state was "bowing to the inevitable," but added that he was pleased that the Army would continue to permit fishing in the waters off Sandy Hook, provided the fishermen had valid permits issued by post authorities.[44]

4. Army Spokesman Describes Difference in Status

Soon afterwards, as a follow-up to the Stevens press conference, Headquarters, First Army, declared that effective July 1 Fort Hancock was being reactivated as a Class 1 installation. Although inactivated since May 1, 1953, some 50 percent of the net useable troops' barracks capacity of 2,900 was currently being employed, principally for antiaircraft activities. Of the more than 300 structures on the post inventory, 175 were in use. Sixty-nine of 71 family housing units were occupied.

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43. Ibid.

44. Ibid.

As the post was inactive, it was authorized a caretaker detachment numbering two service men and 85 civilians. This detachment, however, was unable to effectively support a post with the soldiers (about 1,375) and activities presently stationed there. This support included that normally provided by a station complement, such as engineer labor details, fire fighting crews, roads and grounds maintenance, operation of recreation and morale establishments, and living quarters and medical facilities. Antiaircraft personnel had to be detailed to perform many of these duties, which diverted them from their primary mission of providing antiaircraft protection to the New York City area. Since May 1953 most of the logistical support for the post had been provided by Fort Monmouth, 16 miles away. By becoming an active post, Fort Hancock would be authorized an increase of 53 military and 62 civilian billets.[45]

5. July 1, 1956, Ceremonies and Open House

On Sunday, July 1, as scheduled, Fort Hancock was reactivated, with the primary mission of providing logistical support to antiaircraft units. The occasion was celebrated by a parade and a demonstration of its NIKE batteries. The day's show was inaugurated by a parade of the three NIKE battalions (the 11th, 526th, and 967th Antiaircraft Artillery Missile Battalions) currently stationed at the post. (The 526th was assigned to Fort Hancock, while the 11th and 967th were there for training purposes.)

The public had been invited, but those in attendance consisted principally of newspaper people, reviewing officers, and a large number of service children. The Air Force, which had a radar installation at the post, was represented by two officers.

After the parade, the visitors watched a NIKE alert. At the alarm, the scream of a siren, officers and rank and file manning the

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45. News Release, "Fort Hancock Slated for Reactivation," Files, Sandy Hook Unit, Gateway National Recreation Area.

four batteries rushed from their barracks and raced to the nearby launching pads. There, they raised the slim white missiles to their 85 degree launch position. All missiles were ready to fire seven minutes after the siren wailed. During this period, a jet-powered bomber would have traveled more than 70 miles.[46]

6. YMCA Becomes Enlisted Men's Service Club

Soon after the post was reactivated, the former YMCA was redecorated and opened as an enlisted men's service club under the direction of Mrs. Katherine Meyers. The furnishings and equipment were trucked to Sandy Hook from Camp Kilmer.[47]

G. The Garrison Reflects the Mission

1. Pre-NIKE-AJAX Years

Fort Hancock, during the years between July 1, 1953, and September 1, 1959, was home to a number of units. In the weeks immediately before and the months after the NIKE launching and tracking sites were completed and accepted on April 13, 1955, the post was an important center for organization and training of antiaircraft missile battalions being activated for defense of the New York metropolitan area.

From July 1 to December 1, 1953, the only units assigned to Fort Hancock, in addition to the 1225th ASU, were the 318th and 354th Signal Detachments (Radar Maintenance), and the U. S. Army Infirmary (10 Bed). Then, on December 4, the 526th Antiaircraft Artillery Battalion (Gun), less Battery B, arrived at Sandy Hook, having been transferred from Fort Totten. Battery B rejoined the battalion in February, and, on the 13th, the unit was redesignated the 526th Antiaircraft Missile Battalion.[48]

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46. New York Times, July 3, 1956, p. 27.

47. Enlisted Men's Service Club Photograph Album, Files, Sandy Hook Unit, Gateway National Recreation Area.

48. Station Directories, July 1953-February 1954; Unit Jacket, 526th Antiaircraft Artillery Missile Battalion, CMH.

In June 1954, the 318th and 354th Signal Detachments (Radar Maintenance--Type E) were transferred to nearby sites. The two units, however, continued to receive their mail at Fort Hancock for several months, the latter until it was deactivated on November 15, 1954, and the former until reassigned to Fort Tilden in February 1955.

Two military police detachments were sent to Sandy Hook from Fort Dix in the autumn of 1954 for temporary duty.[49] The detachment from the 716th Military Police Battalion (TCS) returned to Fort Dix on December 1 and the provisional detachment (TCS) was recalled four weeks later.[50]

2. Training Center for Area NIKE-AJAX Personnel

Late in the winter of 1955, while the Fort Hancock NIKE missile and tracking sites were nearing completion, the 66th Antiaircraft Artillery Missile Battalion's Battery B joined the 526th Antiaircraft Missile Battalion (less Battery B) at Sandy Hook.[51] Then, on March 11, less than five weeks before the missile sites were accepted, the 483d Antiaircraft Artillery Missile Battalion was activated on post.[52]

As of June 30, 1955, two and a half months after the launching and tracking stations had been accepted, there were based at Fort Hancock:

66th Antiaircraft Artillery Missile Battalion (NIKE) (Continental)
483d Antiaircraft Artillery Missile Battalion (NIKE) (Continental)

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49. Station Directories, February-June 1954.

50. Station Directories, June-December 1954.

51. Unit Jacket, 66th Antiaircraft Missile Battalion, CMH. On July 9, 1954, the 66th Antiaircraft Battalion (gun, 120 mm) had been redesignated the 66th Antiaircraft Artillery Missile Battalion, with an authorized strength of 20 officers, 15 warrant officers, and 404 enlisted men.

52. Unit Jacket, 483d Antiaircraft Artillery Missile Battalion, CMH.

526th Antiaircraft Artillery Missile Battalion (less Batteries B and D)
1225th Army Service Unit
U. S. Army Infirmary (10-Bed)[53]

By December 31, 1955, the 66th and 483d Antiaircraft Artillery Missile Battalions had left Sandy Hook: the 66th transferring to Fort Totten in July and the 483d to Camp Kilmer in December. Meanwhile, a detachment from the 716th Military Police Battalion (TCS) had spent the late summer and autumn at the post, returning to Fort Dix in December.[54]

During the first five months of 1956, following the decision to reactivate Fort Hancock, the garrison was reinforced by the 967th Antiaircraft Artillery Missile Battalion (NIKE) (Continental), activated at Sandy Hook on March 1, and the 11th Antiaircraft Artillery Missile Battalion (NIKE) (Continental) activated at the post on April 2.[55]

Then, in June, the garrison was reduced by transfer of the 967th Antiaircraft Artillery Missile Battalion to West Haven, Connecticut. By August 31, there had been a number of additional station changes: Battery D, 12th Antiaircraft Artillery Battalion (90 mm gun) and the 215th Signal Detachment (Radar Maintenance) (Type E) had arrived from Fort Wadsworth; Battery A, 526th Antiaircraft Artillery Missile Battalion had been sent to South Amboy, New Jersey; Headquarters and Headquarters Battery, and Batteries A, B, C, and D, 11th Antiaircraft Artillery Missile Battalion, had been reassigned respectively to Manchester, East Windsor, Portland, Cromwell, and Simsbury, Connecticut.

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53. Station Directory, June 1955.

54. Station Directories, July-December 1955.

55. Unit Jackets, 11th and 967th Antiaircraft Artillery Missile Battalions, CMH.

As of October 31, 1956, the Fort Hancock garrison included:

Battery D, 12th Antiaircraft Artillery Battalion (90 mm gun)
215th Signal Detachment (Radar Maintenance) (Type E)
526th Antiaircraft Artillery Missile Battalion (NIKE) (Continental), less Batteries A, B, and D
1225th Army Station Unit[56]

On January 1, 1957, the 741st Antiaircraft Artillery Battalion (NIKE) (Continental) was activated at Fort Hancock. In February, the battalion was deployed to various Connecticut and New York missile sites: Headquarters and Headquarters Battery and the medical detachment to site BR 65C in Fairfield, Connecticut; Battery A to site RRFO in Brookhaven, New York; Battery B to site BR 04 in Ansonia, Connecticut; Battery C to site 94 CL in Shelton, Connecticut; and Battery D to site HA 67CL in Plainsville, Connecticut. The battalion commander and his staff remained at Sandy Hook until August, when they took station at Fairfield.[57]

On December 20, Battery D, 12th Antiaircraft Artillery Battalion (90 mm gun), was inactivated at Fort Hancock and its personnel reassigned.[58]

3. Months of Reduced Activity

As of April 30, 1958, these units were posted at Fort Hancock:

1225th Army Service Unit
U. S. Army Military Police Detachment (1225-01)

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56. Station Directories, January-December 1956.

57. Station Directories, January-August 1957; Unit Jacket, 741st Antiaircraft Missile Battalion, CMH.

58. Station Directory, December 1957.

215th Signal Detachment (Radar Maintenance) (Type E)
526th Antiaircraft Artillery Missile Battalion (NIKE-AJAX) (Continental), less Batteries A, B, and D

The military police detachment had been organized at Fort Hancock in the late winter of 1957-58.[59]

In August 1958, the 52d Antiaircraft Artillery Brigade (Air Defense), Radar Section 2, was organized at Fort Hancock.[60]

H. Day-to-Day Activities as Reported by Antiaircraft Journal

1. The "Steel Ring"

During the autumn of 1953, a number of sites manned by units of the 52d Antiaircraft Artillery Brigade were used to film portions of the documentary, "The Steel Ring," being prepared for a television presentation to enable the public to better understand the role of the antiaircraft battalions in the defense of the nation's key cities and industrial centers. The film zeroed in on the daily life of the soldiers at the sites, as well as scenes showing the men going into action when the alert sounded.[61]

In March, senior brigade officers previewed and critiqued, "The Steel Ring," scheduled to be released in the near future on the Army's television program "The Big Picture."[62] The documentary was given its initial public showing over two New York City TV channels on Sunday, April 25.[63]

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59. Station Directories, January 1957-February 1958.

60. Station Directory, August 1958.

61. Antiaircraft Journal, November-December 1953, Vol. 96, p. 33.

62. Antiaircraft Journal, March-April 1954, Vol. 97, p. 38.

63. Antiaircraft Journal, May-June 1954, Vol. 97, p. 33.

2. Hometown News Service Activities

In the autumn of 1953, units of the 52d Brigade, including those at Sandy Hook, cooperated with the First Army in a program of preparing a series of tape recorded interviews by service men. Upon completion of the recordings, they were sent through the Hometown News Service to radio stations near the homes of the men involved, and were broadcast during the Christmas season.[64]

3. 52d Brigade Organization Day

To celebrate organization day, March 20, 1954, brigade units held competitive field events, ceremonies for awards, cocktail parties, and dances.[65]

4. Firing the Montauk Point Range

On March 1, 1954, the Montauk Point range reopened for the season, and during the spring all 52d Brigade battalions visited the area for prerequisite service practice.[66]

In April and May competitions were held among the battalions to determine which units were the most proficient in battery firing procedures. Each battalion selected its best radar crew and gun crew for the competition. Battery C, 34th Antiaircraft Battalion, won the M2 gun and Battery C, 737th Antiaircraft Battalion, won the competition on the Ml gun.[67]

5. Changes in Command

Early in January 1954, Lieutenant Colonel Carl F. Chirico, commanding officer of the 526th Antiaircraft Artillery Battalion, was

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64. Antiaircraft Journal, November-December 1953, Vol. 96, p. 33.

65. Antiaircraft Journal, March-April 1954, Vol. 97, p. 38.

66. Antiaircraft Journal, May-June 1954, Vol. 97, pp. 33-34.

67. Ibid., p. 33.

reassigned to the Far East Command. His replacement was Lieutenant Colonel Robert W. Molloy, former 52d Brigade S-3.[68]

Then in July, Colonel Spengler, who had commanded the brigade for the previous 13 months, was reassigned to be Professor of Military Science and Tactics at the University of Hawaii. He was replaced by Brigadier General William H. Henning, who came to the brigade from the Pentagon where he had served in the Office of Assistant Chief of Staff G2. Coincidentally, Colonel Malloy was ordered to the Pentagon.[69]

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68. Antiaircraft Journal, January-February 1954, Vol. 97, p. 37.

69. Antiaircraft Journal, September-October 1954, Vol. 97, p. 25.

IV. FORT HANCOCK AS A GUARDIAN OF THE NEW YORK-PHILADELPHIA CORRIDOR

A. The NIKE-HERCULES Comes to Sandy Hook

1. Defense Department Spokesman Extolls the NIKE-HERCULES

On April 18, 1957, a Department of Defense spokesman informed the media that a number of battalions armed with conventional aircraft weaponry (90 mm guns, 75 mm Skysweepers, and quad-50 mm guns) would be disbanded on June 15. Personnel from these units would be trained to man the NIKE-HERCULES. Among the commands to be broken up would be one of those assigned to the defense of New York City and stationed at Wallington, New Jersey.

The NIKE-HERCULES, the Army official continued, was larger and swifter than the NIKE-AJAX. It had a range of more than 50 miles, but, more important, it could be fitted with an atomic warhead. When fired with the latter, it had the capability of knocking down an entire formation of high level bombers before it could penetrate United States air space. The NIKE-HERCULES could also be fired with warheads containing conventional explosives. Introduction of the NIKE-HERCULES into the air defense system would be the second phase of a program to boost the nation's defensive capabilities through deployment of atomic weaponry. In February, the Department of Defense had announced that atomic air-to-air missiles were being made available to Air Force interceptor squadrons.[1]

2. General Tarrant Tells of Plans to Introduce the NIKE-HERCULES to Metropolitan Area

Eighteen weeks later, on September 28, Brigader General Legare K. Tarrant, commander of ARADCOM's First Region, informed the public that the New York City area would get its first NIKE-HERCULES missiles by the spring of 1958. He stressed that installation of the atomic warheads, on the missiles ready for launching, would present no danger

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1. New York Times, April 19, 1957, p. 3.

to neighboring communities. The warheads were so constructed that they could not be detonated by saboteurs. Moreover, the HERCULES had a safety factor advantage over the AJAX, the nation's mainstay for antiaircraft defense, in that it employed solid rather than a liquid propellant for its principal engine. Solid fuels were not only safer but were more reliable.

General Tarrant attributed the superior effectiveness of the HERCULES to numerous advances in design. The prime contractors for this missile were Western Electric Company and Douglas Aircraft. Use of more powerful rocket engines gave the HERCULES more than double the range of the AJAX, with 25 percent more altitude. The radar units used to zero in on enemy targets and guide the HERCULES onto the kill were reported to have much greater ranges than those at the AJAX sites. They were also said to be more resistant to jamming. General Tarrant pointed out that the AJAX sites could be modified to accommodate the HERCULES.[2]

3. Secretary McElroy Sets a Date

On January 28, 1958, Secretary of Defense Neil H. McElroy announced that by June the Army would have four combat-ready networks of NIKE-HERCULES missiles positioned to protect four of the nation's key population centers--New York City, Washington-Baltimore, Philadelphia, and Chicago. A Defense Department spokesman described this as "the beginning of a nationwide program of converting the Army's surface-to-air missile sites to the dual capability of firing both the Nike- and the Nike-HERCULES missiles."

During recent months the NIKE-AJAX had been often belittled in private by military officials. As the first in the NIKE series, it was capable of handling only conventional explosives at a range of about 40 miles. Many officers had voiced their opinion that it was obsolete in an era of long-range ballistic missiles. Some modification in

2. Ibid., September 19, 1957, p. 13.

existing installations, the official noted, would be required, and negotiations were about to be undertaken to accomplish this by private contractors. First Army spokesmen emphasized that no new sites would be required to integrate the NIKE-HERCULES into the existing framework of air defense in the New York area.[3]

4. The Middletown Tragedy

On Thursday, May 22, there was a tragedy at the Middletown NIKE-HERCULES installation, when eight missiles exploded, killing ten men and injuring several others. The blast, which occurred only hours after the Army had announced that it was converting the Middletown base and eight other New Jersey sites from AJAX to HERCULES missiles, caused some $500,000 worth of damage.

The explosion confronted the Army with a serious public relations problem. Defense Department spokesmen observed that there had been no off-base casualties at Middletown. To reassure the public, in view of the decision to replace the AJAX with the HERCULES, the Army pointed out that "the possibility of an accidental explosion while transporting or storing nuclear weapons is so remote as to be negligible."[4]

5. Fort Hancock Converts to NIKE-HERCULES

Progress was slower than anticipated. More than a year passed before any greater New York-area NIKE-HERCULES sites became operational. Finally, on September 1, 1959, the Sandy Hook emplacements were converted to the new system. Twelve days later, on the 12th, Army officers led a tour of Monmouth County municipal and civic leaders and

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3. Ibid., January 29, 1958, pp. 1, 12.

4. Ibid., May 23, 1958, pp. 1, 10, and May 28, 1958, p. 14. Life magazine for June 2, 1958, featured an article and photographs of the Middletown blast.

the press to Fort Hancock, where they saw the "first two Nike-HERCULES guided missile fire units to become operational in northern New Jersey."[5]

6. Army Provides More Details on NIKE-HERCULES

The Army at this time released additional data regarding the performance of the new system. According to Brigadier General R. A. Hewett, the 52d Brigade commander, and his staff, the NIKE-HERCULES possessed a range of more than 75 miles and an altitude capability of well over 100,000 feet. HERCULES was an outgrowth of the NIKE-AJAX research and development program, and "its universal-type ground control equipment permits both NIKE-HERCULES and NIKE-AJAX to be fired from the same launcher area and to be directed by the same guidance equipment." The HERCULES system merely refined and perfected the "lethality" of AJAX by acquiring and attacking targets at far greater ranges, higher altitudes, and greater speeds. HERCULES would range from low altitudes to heights far in excess of any known drone-type or ramjet missile, as well as manned aircraft.

With its boosters NIKE-HERCULES weighed about five tons and had an overall length of 41-1/2 feet. The missile itself measured 27 feet in length with a diameter of 30 inches. Its cluster of four booster rockets was 14-1/2 feet long. NIKE-HERCULES was a two-stage missile employing a solid-fueled propellent rocket booster and a similar fueled rocket engine to sustain its flight.

In tests at New Mexico's McGregor Range, HERCULES had scored high-altitude kills against targets traveling in excess of 1,500 miles per hour. An improved computer and guidance system permitted NIKE-HERCULES to intercept its targets at a hypersonic closing speed with an accuracy resulting in an 85 percent kill ratio.

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5. New York Times, September 13, 1959, p. 134; Harbor Watch, September 11, 1959.

HERCULES was a fully mobile system, which could be airlifted, if necessary, to a site. It could be fitted alternately with a nuclear warhead or a vastly improved fragmentation warhead. Equipped with an atomic warhead, the HERCULES represented an advance over NIKE-AJAX as great as the departure achieved by AJAX over the conventional 90-mm duel purpose gun of World War II.[6]

7. Expanding the System

Some nine months later, on June 28, 1960, the Pentagon informed the media that it was strengthening the antiaircraft defenses of seven major metropolitan areas, including New York City. This move would increase the numbers of nuclear-armed NIKE-HERCULES missiles batteries in nearby populated regions on the Atlantic and Pacific coasts and near the Canadian frontier. Concurrently, measures were taken to cancel plans to develop NIKE-HERCULES batteries at Strategic Air Command bases and the Hanford, Washington, atomic energy plant. Fifteen batteries of NIKE-HERCULES missiles were to replace the same number of NIKE-AJAX batteries positioned near Washington-Baltimore, Philadelphia, New York, Detroit, Chicago, San Francisco, and Los Angeles. New York was to receive two of these 15 NIKE-HERCULES batteries. Existing 200-mile Bomarc antiaircraft missiles deployed by the air force and other army-operated NIKE-AJAX batteries were not affected by this order.[7]

The conversion of NIKE-AJAX emplacements to the NIKE-HERCULES system had progressed to a degree, where the Pentagon, on the 20th anniversary of the Pearl Harbor attack, announced that national guard units manning air defense batteries would be armed with NIKE-HERCULES missiles beginning late in 1962. At present, the guard units shared with regular outfits the task of defense of key population and industrial centers against air onslaughts. Since 1957 these guard units had been armed with AJAX missiles. The transition from the AJAX

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6. Harbor Watch, September 11, 1959.

7. New York Times, June 29, 1960, p. 2.

to the HERCULES was to be gradual, and the former would "continue for sometime to contribute significantly to the air defense shield of America."[8]

B. Manning the Missiles and Garrisoning the Post

1. NIKE-AJAX Armed Units Replaced by NIKE-HERCULES Personnel

There were few changes in the units assigned to Fort Hancock during the four months ending August 31, 1958, but, on September 1, there was a major reorganization. The 526th Antiaircraft Artillery Battalion (NIKE-AJAX), headquartered at Sandy Hook since December 1953, was inactivated and the personnel reassigned to the 4th Missile Battalion (NIKE-HERCULES), 71st Artillery (less Batteries A, B, and D).[9]

At the end of 1959, these units were stationed at Fort Hancock:

1225th Army Service Unit
U. S. Army Military Police Detachment (1225-01)
4th Missile Battalion (NIKE-HERCULES), 71st Artillery, less Batteries A, B, and D
Battery D, 5th Missile Battalion (NIKE-HERCULES), 7th Artillery (Site-54)
52d Artillery Brigade (Air Defense), Radar Section 2
215th Signal Detachment (Radar Maintenance) (Type E)[10]

In February 1960, ConnSector, XIII U. S. Army Corps (1371-03) (490 Capitol Avenue) was assigned to the Sandy Hook facility,

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8. Ibid., December 8, 1961, p. 40.

9. Station Directories, September 1958- September 1959; Unit Jacket, 71st Air Defense Artillery, CMH. The 71st Artillery was a parent regiment under the Combat Arms Regimental System. Batteries A, B, and C, 4th Missile Battalion, 71st Artillery, were respectively assigned to: Battery A, South Amboy; Battery B, Leonard Chapel, and Battery D, Holmdel.

and in August, Battery D, 5th Missile Battalion (NIKE-HERCULES), 7th Artillery, was transferred to Fort Totten.[11]

There were no changes in the units posted to Fort Hancock during the next 16 months. On January 1, 1962, these commands were at Sandy Hook:

1225th Army Service Unit
U. S. Army Military Police Detachment (1225-2)
ConnSector, XIII U. S. Army Corps (1371-03) (Capitol Avenue)
4th Missile Battalion (NIKE-HERCULES), 71st Artillery, less Batteries A, B, and D
52d Artillery Brigade (Air Defense), Radar Section 2
215th Signal Detachment (Radar Maintenance) (Type E)[12]

Late in the spring of 1963, the 215th Signal Detachment (Radar Maintenance) (Type E) was redesignated 215th Signal Detachment (Search Radar Maintenance).[13]

2. Fort Hancock Becomes Headquarters for the 52d Artillery Brigade (Air Defense)

On January 26, 1964, Headquarters and Headquarters Battery, 52d Artillery (Air Defense), were transferred to Fort Hancock from Highlands Army Air Defense site. Coincidentally, the brigade's Radar Section 2 was detached to Site 56R.[14]

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10. Station Directories, October-December 1959. Battery D, 5th Missile Battalion, 7th Artillery, had reached Sandy Hook from Crawford Corners, New York, in the winter of 1958-59.

11. Station Directories, January-September 1960; Unit Jacket, 5th Battalion, 7th Air Defense Artillery, CMH.

12. Station Directories, September 1960-December 1961.

13. Station Directories, January 1962-June 1963.

14. Station Directories, June 1963-January 1964.

In June 1964, Headquarters and Headquarters Battery and Battery C, 4th Missile Battalion (NIKE-HERCULES), 71st Artillery, were inactivated at Fort Hancock, and Headquarters and Headquarters Battery and Battery C, 3d Battalion, 51st Missile Battalion (NIKE-HERCULES) activated at the post. This reorganization was effected without a transfer of personnel and equipment.[15]

Then in the summer of 1964, ConnSector, XIII U. S. Army Corps (1371-03) was transferred.

As of February 28, 1965, these units were stationed at Sandy Hook:

U. S. Army Garrison (1225th ASU)
U. S. Army Military Police Detachment (1A-1225-0)
3d Missile Battalion (NIKE-HERCULES), 51st Artillery, less Batteries A and D (Battery A was at Site NY60, South Amboy, and Battery D was at Site NY54, Holmdel)
Headquarters and Headquarters Battery, 52d Artillery Brigade (Air Defense)
215th Signal Detachment (Search Radar Maintenance)[16]

In April, the 235th Military Police Detachment was activated at the post and the U. S. Army Military Police Detachment (1A-1225-01) deactivated.[17]

On September 1, 1965, the 51st Ordnance Company (Comp. Svc.) was assigned to Fort Hancock from Thule, Greenland. It was a bookkeeping transfer, because the unit arrived without any personnel and

15. Station Directory, January 1964; Unit Jackets, 51st and 71st Air Defense Artillery, CMH.

16. Station Directories, June 1964-65.

17. Station Directory, April 1965.

equipment. Then, on October 15, the 51st Ordnance Company was inactivated.[18]

In March 1966, the 215th Signal Detachment (Search Radar Maintenance) was inactivated. As of April 30, 1966, these commands were assigned to Fort Hancock:

U. S. Army Garrison (1225th ASU)
235th Military Police Detachment
3d Missile Battalion (NIKE-HERCULES), 51st Artillery, less Batteries A, C, and D (Battery C at site NY56)
Headquarters and Headquarters Battery, 52d Artillery Brigade (Air Defense)[19]

3. Brigade Headquarters Return to the Highlands

In September 1967, 52d Artillery Brigade headquarters returned to the Highlands Army Air Defense Site. There were no changes in the units stationed at Sandy Hook during the next 17 months. On February 28, 1969, these commands were billeted at Fort Hancock:

U. S. Army Garrison (1A-1225)
235th Military Police Detachment (WCVQ)
3d Missile Battalion (NIKE-HERCULES), 51st Artillery, less Batteries A and D (Battery C at site NY56)
Headquarters and Headquarters Battery, 52d Artillery Brigade (Air Defense)[20]

During the summer of 1969, the 235th Military Police Battalion (WCVQ) and the U. S. Army Garrison (1A-1225) were

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18. Station Directories, September- November 1965; Unit Jacket, 51st Ordnance Company, CMH.

19. Station Directories, January-April 1966.

20. Station Directories, September 1967-April 1969.

inactivated. As of December 1969, there were posted at Fort Hancock two units:

Battery C, 3d Missile Battalion (NIKE-HERCULES), less Batteries A and D

Headquarters and Headquarters Battery, 52d Artillery Brigade (Air Defense)[21]

C. Missile Master Comes to the Highlands

On April 24, 1957, Headquarters, First Army, announced that a control center called "Missile Master" would be located at the New Jersey Highlands. This electronic center, one of the first in the United States, would control the fire of all NIKE guided missile batteries in the New York City metropolitan area. Its mission would be to control the fire of the batteries to insure that certain enemy targets did not draw too much fire, while other formations approached unchallenged. It would also guarantee that NIKE-AJAX batteries did not fire on friendly aircraft.

Between 18 and 20 NIKE sites in the greater New York area would be coordinated from the Missile Master. They were dispersed over an area from the north shore of Long Island to Kensico Reservoir, New York; to the Delaware River; south past Point Pleasant, New Jersey; and southwest beyond New Brunswick.

Missile Master had been under development since 1945 by the Martin Company of Orlando, Florida, the principal contractor. Each center would be installed in a large two-story structure equipped with radar and computers. Nearby would be radar towers to provide data on the direction, distance, and height of aircraft in the area.

Missile Master could employ target information relayed from Semiautomatic Ground Environment (SAGE) employed by the Air Defense

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21. Station Directories, June- December 1969. Battery A, 3d Missile Battalion, was posted at Fort Tilden and Battery D at Holmdel.

Command to direct jet interceptors. Whenever data from SAGE was incomplete for technical reasons, Missile Master could utilize information picked up by its own radar.[22]

Controllers manning Missile Master would monitor the radar screens and observe how the individual NIKE-AJAX batteries engaged the foe. If they concentrated too much on one group of targets, neglecting others, the controllers could push buttons to shift some of the fire to other specified targets. A controller, known as a "friendly protector," would have the task of stopping a NIKE battery that was honing in on United States aircraft.

Some 100 highly trained men would be required to man a Missile Master center. A score of these would be officers. Use of the system would eliminate a large number of tasks at the individual NIKE sites, freeing personnel for other billets.[23]

It was June 1960 before the Missile Master, whose electronic components cost $4,000,000, was operational. This was 30 months after the Fort George G. Meade Missile Master, the nation's first, became operational. It could function independently in one area or it could be linked to the nationwide radar-defense system. Major General Palmer W. Edwards, Deputy Director of ARADCOM, who made the dedication speech, stated that this new system would increase "by four or five times, the potential of the missiles we have reaching their maximum capability." Missile Master consisted of several banks of separate radar monitoring sets, a large central plotting chart showing the position of all aircraft, a separate section for pinpointing and marking friendly aircraft, and an electronic memory unit that banked information.[24]

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22. SAGE was situated on the ground and was partially automated and partially operated by Air Force controllers.

23. New York Times, April 25, 1957, pp. 1, 15.

24. Ibid., June 7, 1960, p. 1; NIKE-Sage Brush, April 1969.

D. Headquarters, 52d Brigade, Moves from Fort Wadsworth to the Highlands

On July 4, 1960, coincident with activation of the Missile Master, Headquarters and Headquarters Battery, 52d Air Defense Artillery Brigade, relocated from Fort Wadsworth to Highlands Air Force Station. Here, the brigade shared facilities with the Air Force's 646th Radar Squadron (SAGE). The missions of the two commands were vital and mutually dependent for a successful air defense of the region. The 646th Squadron was a component of the Semiautomatic Ground Environment System based at McGuire Air Force Base, New Jersey.[25]

E. Deployment and Use of Sentry Dogs

1. Training the Dogs and Handlers

To provide better security for the nuclear-capable NIKE-HERCULES missile sites, ARADCOM in November 1958 began training handler-sentry dog teams at Fort Benning, Georgia. Two months later, in January 1959, the team training was relocated to Lackland Air Force Base, Texas.

Use of trained dogs for warfare and security was not new. Records document that as early as 700 B.C. dogs were trained to attack a foe and protect their masters. They had been employed in both World Wars I and II and in the Korean Conflict as sentries, scouts, messengers, and in similar roles in which their keener senses made them more alert to danger than their soldier-handlers. These senses, coupled with the intelligence and training of the handlers, would be employed at NIKE-HERCULES sites to guard against sabotage, pilferage, fire, and unauthorized entry.

Handlers were chosen from among men already trained as military police. They had to meet high standards. Then came the most important step--matching handlers with dogs and training them as teams.

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25. Harbor Watch, August 12, 1960; ARADCOM Argus, May 1, 1961.

This objective evolved by trial and error, but frequently teams worked smoothly from the beginning. When the teams had passed exhaustive final tests, they were ready for transfer to NIKE-HERCULES sites to assume their duties.[26]

2. Construction of and Improvements to Kennels

Preparatory to the arrival of the teams at Fort Hancock, a canine kennel, costing $3,600, was erected in the autumn of 1959. It was sited adjacent to and northwest of the missile range launching area. The kennel was assigned number T458 in the post building inventory.

In May 1965, a new roof was installed over the kennel at a cost of $663. Then, in December 1967, a support building and screening were added at a cost of $8,080.[27]

3. Call for More German Shepherds

Soon after the kennels were accepted, the Army, in January 1960, called for more German Shepherds to be trained for sentry duty at NIKE sites. Five months before the Quartermaster Department had announced that 1,000 dogs were to be procured for Army service at a rate of 110 dogs per month. About 300 dogs had been purchased during the first 90 days following the announcement, but the number being offered had fallen off in December.[28]

This call resulted in a desired response, and, before many weeks passed, there arrived at Fort Hancock four ARADCOM dogs and their handlers. Upon the team's arrival, the battery commander assumed responsibility for the team's continued training.

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26. Department of the Army Release, "Sentry Dogs and Site Security," Files, Sandy Hook Unit, Gateway National Recreation Area.

27. Real Property Record Cards, Building T458, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

28. New York Times, January 24, 1960, p. 54.

The site had been equipped with kennels and exercise facilities, and the training was continued under supervision of a senior dog handler. This man was a noncommissioned officer, an experienced military policeman skilled in overseeing sentry dog training. The dogs were groomed regularly by their handlers and were given periodic examinations by veterinaries.[29]

4. Varcon Demonstrates His Bite

Local officials from Monmouth County cities and towns, on their November 1972 visit to Sandy Hook, watched a demonstration featuring the sentry dog Varcon. A soldier dressed in a heavily padded suit acted as an intruder into the missile site. Varcon intercepted the trespasser, sinking his teeth into the pads. Varcon was one of several one-man sentry dogs stationed at the NIKE-HERCULES site.[30]

F. National Guard Assumes Responsibility for Many NIKE Sites

Units of the Army National Guard were the first commands in the United States reserve forces to be equipped with surface-to-air guided missiles. The Department of the Army had authorized the national guard to convert 32 conventional armed antiaircraft batteries into NIKE-AJAX missile units. The conversion began with the training phase in October 1957. Nearly a year of intensified training was required to prepare technician personnel to operate a missile battery effectively.[31]

Consequently, in the summer of 1958, three battalions of the 102d Antiaircraft Artillery Brigade, New York National Guard, spent two weeks at Fort Hancock being schooled in the operation of the NIKE-AJAX missile system. This was part of the long-range policy directed toward making the guard responsible for a number of the sites.

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29. NIKE-Sage Brush, August 1969.

30. Long Branch Daily Register, November 29, 1972.

31. Department of the Army Press Release, "Army National Guard Program," Files, Sandy Hook Unit, Gateway National Recreation Area.

Colonel Leonard S. Allen, a group commander in the brigade, explained that guard operation of the sites would result in a great economy in manpower and money. This would be accomplished by having the sites maintained in a state of readiness by a cadre of trained guardsmen in civilian status, instead of a full complement of regulars as at present. Major Lars Ekwurzel, brigade information officer, estimated that this action would save the government $350,000 a year per site.

The NIKE specialists would be reinforced by other members of the unit who resided in the area. These guardsmen would meet every other Sunday for training and practice.

Battalion trainees from the 245th Missile Battalion (NYNG) had been separated into groups for concentration in three areas of specialization in the NIKE operations--radar, fire control, and launching. Selected guard personnel would be sent to Fort Bliss for advance training.[32]

On September 14, 1958, in the Los Angeles area, the 4th Missile Battalion, 251st Artillery, California National Guard, became the first guard surface-to-air missile unit to be integrated into the system when it occupied and assumed round-the-clock operations at four battery sites.[33] Then, on April 10, 1959, the Pentagon announced that between June 30 and September 30, 24 more NIKE antiaircraft missile batteries would be taken over from the regulars by the Army National Guard. The guardsmen would have full responsibility for manning the batteries day and night. In the greater New York City area among the units involved would be the 109th Antiaircraft Missile Battalion, New Jersey National Guard.[34] Before the program was completed, the Army National Guard

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32. New York Times, July 29, 1958, p. 13.

33. Department of the Army Press Release, "Army National Guard Program," Files, Sandy Hook Unit, Gateway National Recreation Area.

34. New York Times, April 11, 1959, p. 22.

nationwide occupied 76 batteries. Participating units represented 14 states with deployment in 15 defended areas.[35]

Fort Hancock, besides furnishing logistical support to sites manned by national guard units in northern New Jersey, provided training facilities and instructors. In August 1959, personnel of the 254th Artillery Group (Air Defense), New Jersey National Guard, spent two weeks at Fort Hancock, receiving instructions in the deployment and operation of the NIKE-AJAX.[36]

G. Brigade Commanders Come and Go

1. Colonel Daly as Commander: August 1960-September 1961

The commanding officer of the 52d Artillery Brigade (Air Defense), in the weeks following transfer of brigade headquarters from Fort Wadsworth to Highlands Air Force Station, moved into Fort Hancock quarters. Although headquarters remained at Highlands Air Force Station from the summer of 1960 until September 1964, the brigade group commander, during the next 14 years, was closely associated with Sandy Hook.

At the time of the transfer, Brigadier General Robert A. Hewitt commanded the brigade and Lieutenant Colonel Chadwick P. Simmons, Fort Hancock. On June 30, 1960, General Hewitt was reassigned to the Pentagon, and Colonel John Ray, commanding the 80th Artillery Group at Fort Wadsworth, became acting brigade commander.

Then, on August 1, in a brief ceremony at Fort Hancock, Colonel John H. Daly relieved Colonel Ray as brigade commander. The unit colors were presented to Colonel Daly by Colonel Ray in the presence of an honor guard and military band. Attending the ceremony were unit

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35. Department of the Army Press Release, "Army National Guard Program," Files, Sandy Hook Unit, Gateway National Recreation Area.

36. Harbor Watch, August 28, 1959.

commanders and staff officers of the 52d Brigade, its groups and battalions, Army officers from Fort Hancock, Air Force officers from Highlands Air Force Station, and U. S. Coast Guard officers.

The new Fort Hancock commander was a 1936 U. S. Military Academy graduate and a decorated and wounded combat veteran of World War II and the Korean Conflict. Prior to his transfer to Sandy Hook, Colonel Daly had commanded the 3d U. S. Army Missile Command at Fort Bragg, North Carolina.[37] Two months later, on October 1, Daly was promoted from colonel to brigadier general. Daly retained command of the 52d Brigade for 13 months, being reassigned on September 1, 1961, to the Office of the Deputy Chief of Staff for Plans and Policies at North American Air Defense Command (NORAD).

2. General Weld as Commander: October 1961-June 1963

On October 17, 1961, Colonel Seth L. Weld, Jr., reported for duty as commander of the 52d Brigade. A 1935 graduate of the U. S. Military Academy, he had been commissioned a second lieutenant in the Coast Artillery. Prior to World War II, he served in various Coast Artillery and antiaircraft units in the United States and Hawaii. In addition, he graduated from the Coast Artillery School at Fort Monroe, Virginia, in 1940, and became an instructor in the school's gunnery and material department. In December 1941, Weld was assigned to the United States Military Mission to Brazil. After two years in Rio de Janeiro, he was recalled and reported to the Pentagon, where he was assigned to Headquarters, Army Ground Forces. There, he was reponsible for scheduling and shipping oversees Army Ground Forces' units.

Weld, in September 1946, was assigned to Headquarters, U. S. Army Pacific, as Chief of Plans and Operations and wore a second hat as operations officer of the Hawaiian Command. After this tour of duty, Weld attended the Armed Forces Staff College at Norfolk, Virginia,

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37. Ibid., August 12, 1960.

and in February 1950, he reported to the 5th Antiaircraft Group at Fort Lewis, Washington. Weld, now a colonel, took the group to Hanford, Washington, where he established Camp Hanford and the air defense for the Atomic Energy Commission's nearby facilities.

Colonel Weld studied at the Army War College in 1951-52 and was then assigned to the Command and General Staff College, where he spent the next four years as Director of Combat and Analysis. In 1956, he attended the Strategic Intelligence School in the nation's capital, and his next billet took him to Thailand, as senior military attache. In 1959, Weld was detailed to the U. S. Army Air Defense Center, Fort Bliss, Texas, as commander of the 6th Artillery Group. From May 1, 1960, until October 1961, Colonel Weld served as Chief of Staff of the Army Air Defense Center. On March 30, 1962, some five months after assuming command of the 52d Brigade, Weld was promoted to brigadier general.[38] Weld continued to command the 52d Artillery Brigade (Air Defense) until June 1963, when he was ordered to South Korea for duty with Headquarters, Eighth Army.[39]

3. General Clapsaddle as Commander: June 1963-August 1965

On June 24, 1963, Brigadier General Clarence W. Clapsaddle assumed command of the brigade. Born in Virginia in 1917, Clapsaddle was a 1940 graduate of the U. S. Military Academy. A veteran of the bitter Southwest Pacific fighting on Guadalcanal and of campaigning with the 71st Division in Europe, Clapsaddle was a graduate of the Command and General Staff College and a qualified parachutist.[40]

Seven months after Clapsaddle took command, on January 26, 1964, Headquarters and Headquarters Battery, 52d Artillery Brigade (Air Defense), were transferred from Highlands Air Force Station to Fort

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38. ARADCOM Argus, May 1, 1962.

39. Biography of Brigadier General Seth L. Weld, Jr., Files, CMH.

40. ARADCOM Argus, July 1, 1963.

Hancock. Henceforth, for as long as brigade headquarters remained at Sandy Hook, the brigade commander would wear a second hat as post commander. This move, General Clapsaddle announced, would "allow for greater flexibility" and would result in an "improvement in the overall defense of the vital New York-Philadelphia industrial and population corridor."

The recently activated 19th Artillery Group (Air Defense) was to remain at the Highlands and command the New York City defenses. The other air defense force subordinate to the 52d Brigade was the 24th Artillery Group, responsible for protection of Philadelphia and headquartered at Pedricktown, New Jersey.[41]

In March, General Clapsaddle held a commanders' conference at Fort Hancock. Among those in attendance from the New York City defense were Colonel Robert W. Schafer, 19th Artillery Group (Air Defense); Lieutenant Colonel Herbert A. Graver, commander of the 3d Missile Battalion, 51st Artillery; Lieutenant Colonel Paul E. Jones, 4th Missile Battalion, 71st Artillery; and Lieutenant Colonel Carl D. Shaw, commander of the 5th Missile Battalion, 7th Artillery. From the Philadelphia defense there were: Colonel George B. Macauley, 24th Artillery Group (Air Defense), commanding officer; Lieutenant Colonel Hampton J. Godfrey, commander of the 3d Missile Battalion, 43d Artillery; and Lieutenant Colonel Peter Sweers, 2d Missile Battalion, 59th Artillery commander. Colonel Wilfred Menard, commanding officer of the 112th Artillery Group (Air Defense), and Lieutenant Colonel William Yerkes, 2d Missile Battalion, 166th Artillery, represented Army reserve and national guard units in the brigade area.

Among the speakers at the conference was Brigadier General Bernard S. Waterman, deputy commanding general of First Region, ARADCOM. Waterman reported on the recent Colorado Springs ARADCOM meeting.

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41. ARADCOM Argus, March 1, 1964.

The morning session of the 52d Brigade conference focused on briefings of operations by General Clapsaddle and brigade staff officers. During the afternoon, group and battalion commanders participated in a discussion of air defense problems.[42]

General Clapsaddle remained at Fort Hancock for 26 months, after which he was transferred. On August 10, 1965, a review and farewell ceremony were held at Pershing Field in honor of the general, who was being reassigned to Fort Hamilton as Director of the New York Region, Defense Contract Administration Service. Before the review, Clapsaddle hosted a luncheon for military and civilian guests at the Brick House (the officers' club). The formations passing in review included commanders and troops of the 3d Battalion, 5lst Artillery, and group units constituting the brigade.

Speaking to the troops and guests, General Clapsaddle pointed "with pride" to the expansion of the NIKE-HERCULES system in the 26 months since he had assumed command of the 52d Brigade. Observing that today was the first occasion when all unit colors of the New York-New England-Philadelphia command had flown together, Clapsaddle complimented the officers, troops, and civilian employees for making ARADCOM "a significant mission."[43]

4. General Vann as Commander: September 1965-July 1967

On September 1, 1965, two weeks after General Clapsaddle's departure, Brigadier General Walter M. Vann, a 1939 graduate of the United States Military Academy, assumed command of the 52d Artillery Brigade (Air Defense). Vann would wear a second hat as commander of the Fort Hancock Military Reservation. A veteran of World War II fighting in Europe from Normandy through V-E Day, General Vann

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42. ARADCOM Argus, April 1, 1964.

43. Red Bank Daily Register, August 11, 1965; ARADCOM Argus, August 11, 1965.

wore the bronze star and legion of merit. Before coming to New Jersey, he had served from 1964 to 1965 at Fort Meade, Maryland, as Deputy Director of the Department of the Army Technical Missions and Career Structure Projects.[44]

General Vann's tour of duty at Sandy Hook lasted 23 months. On July 25, 1967, it was announced that he had been promoted to major general and would be reassigned as Director, Defense Contract Administration for the New York Region, where he would oversee more than $9.4 billion in defense contracts.

To honor General Vann on his departure from Fort Hancock, a review was held on Pershing Field at 4 p.m. on July 28. Participating were units from the headquarters, U. S. Army Garrison (1225th ASU); headquarters, 52d Artillery Brigade (Air Defense); Headquarters Battery, 52d Artillery Brigade (Air Defense); Headquarters and Headquarters Battery, 19th Artillery Group; Headquarters and Headquarters Battery, 3d Battalion, 51st Artillery; Headquarters and Headquarters Battery, 5th Battalion, 7th Artillery; Headquarters and Headquarters Battery, 3d Battalion, 43d Artillery; and color guards and the colors from the 24th Artillery Group (Air Defense); 3d Battalion, 5th Artillery; 7th Battalion, 112th Artillery; 2d Battalion, 166th Artillery; 1st Battalion, 192d Artillery; 1st Battalion, 241st Artillery; 2d Battalion, 243d Artillery; and 1st Battalion, 244th Artillery. Music was provided by the 389th Army Band from Fort Monmouth.

Many of General and Mrs. Vann's friends were in attendance. Among the distinguished guests were: Major General Melville B. Coburn, Commanding General, First Region, U. S. Army Defense Command; Major General William B. Latta, Commanding General, U. S. Army Electronics Command, Fort Monmouth; and Colonel Albert Evans, Commander, 21st NORAD Division.

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44. Information Office, General Vann's Biography, July 1, 1967, Files, Sandy Hook Unit, Gateway National Recreation Area.

Before the pass in review, General Coburn decorated General Vann with an oak leaf cluster for the legion of merit in recognition of his exceptionally meritorious conduct in the performance of duty as Commanding General, 52d Artillery Brigade.[45]

5. A Six-Month Hiatus

The Pentagon was slow in naming a replacement for General Vann. From the end of July 1967 until late January 1968, the unit was headed by an acting brigade commander.

6. General Hampton as Commander: January-December 1968

On January 26, 1968, Colonel Rex H. Hampton assumed command of the 52d Artillery Brigade. Unlike most of his predecessors, the 49-year-old Hampton was not a West Pointer, having graduated from Utah State University in 1942, when he was commissioned a second lieutenant in the Coast Artillery. A World War II veteran of North Africa, Sicily, Corsica, France, and Germany, Hampton had recently served on the faculty of the Command and General Staff College.[46]

In August, Hampton was promoted to brigadier general at a ceremony and parade at Pershing Field. Among those in attendance was the commander of ARADCOM's First Region, General Coburn.[47]

7. General Safford as Commander: January 1969-July 1970

On December 7, 1968, General Hampton, having commanded the brigade for eleven months, was reassigned to be Director of the European Sector in the International Security Affairs Division at the

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45. Information Office, "General Vann Departs Fort Hancock," Parade Instructions, Sequence of Events, Files, Sandy Hook Unit, Gateway National Recreation Area.

46. Nike- Sage Brush, August 1968; "Unit History of 52d Artillery Brigade," Information Office Draft, Files, Sandy Hook Unit, Gateway National Recreation Area.

47. Nike-Sage Brush, August 1968.

Pentagon. He was replaced temporarily by Colonel Charles A. Wilson, deputy 52d Artillery Brigade commander. The ceremonies, because of inclement weather, took place in the Fort Hancock gymnasium, with General Coburn, along with "local military dignitaries and guests, in attendance."[48]

Seven weeks later, on January 28, 1969, Brigadier General Robert H. Safford assumed command of the 52d Brigade, in a change of command ceremony held in the brigade commander's office at the Highlands, whereupon, Colonel Wilson resumed his billet as deputy brigade commander.

General Safford, a West Point graduate and much decorated World War II veteran, had been transferred to the 52d Brigade from Fort Bliss, where he had commanded the training center.[49] General Safford headed the 52d Artillery Brigade for 17 months. On July 31, 1970, he retired from both the Army and brigade command, after 34 years' service. He was succeeded by Brigadier General John B. Desmond.[50]

H. Command Structure and Changes: 1963-69

1. The 1963 Reorganization

On November 1, 1963, a reorganization of the ARADCOM regions resulted in elimination of the Fourth Region and addition of seven defenses to the First Region. To reflect this situation, four new group headquarters were activated. They were: the 19th Artillery Group (Air Defense) at the Highlands, to replace the New York Defense Command; the 24th Artillery Group (Air Defense) at Pedricktown, New Jersey, to command the units of the Philadelphia defense; the 17th Artillery Group (Air Defense) at Fort George G. Meade to have charge of command

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48. Nike-Sage Brush, December 1968.

49. Ibid., January 1969.

50. Asbury Park Evening Press, August 1, 1970.

functions in the Washington-Baltimore defense; and the 18th Artillery Group (Air Defense) at Oakdale, Pennsylvania, to assume responsibility of the Pittsburgh defense.[51]

2. October and December 1964 Inactivations and Activations

On October 16, 1964, the Philadelphia defense was integrated with the New York defense, and the 24th Artillery Group (Air Defense), which had controlled the Philadelphia defense, was reduced to zero strength but not inactivated. Ceremonies marking the integration of the two defenses took place on Fort Hancock's Pershing Field, where Colonel George B. Macauley, commanding officer of the 24th, handed the unit's colors to General Clapsaddle.

On Christmas Eve 1964, the 56th Artillery Brigade (Air Defense) was inactivated at Coventry, Rhode Island, and the 24th Artillery Group (Air Defense) was activated to take over the 56th Brigade's former functions. Coincidentally, the Hartford-Bridgeport and Boston-Providence defenses were consolidated into the New England Defense, under the 24th Group. These units were then combined with the 19th Artillery Group (Air Defense), responsible to the 52d Artillery Brigade at Fort Hancock.[52]

3. 52d Brigade Components: July 1, 1965

The units and their commanders assigned to the 52d Brigade (Air Defense) as of July 1, 1965, were:

52d Artillery Brigade (Air Defense), Brigadier General Clarence C. Clapsaddle

New York-Philadelphia Defense

19th Artillery Group (Air Defense), Colonel Robert L. Brooks

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51. ARADCOM Argus, July 1, 1965.

52. Ibid.

3d Missile Battalion, 51st Artillery, Lieutenant Colonel Herbert A. Graver

5th Missile Battalion, 7th Artillery, Lieutenant Colonel Duport M. Copp

3d Missile Battalion, 43d Artillery, Major David H. Sudderth

1st Missile Battalion, 244th Artillery, New York ARNG, Lieutenant Colonel John M. Periale

1st Missile Battalion, 254th Artillery, New Jersey ARNG, Lieutenant Colonel William S. Frye

2d Missile Battalion, 166th Artillery, Pennsylvania ARNG, Lieutenant Colonel William C. Yerkes

New England Defenses

24th Artillery Group (Air Defense), Colonel Abb Chrietzberg

3d Missile Battalion, 5th Artillery, Lieutenant Colonel Alfred K. Baum

1st Missile Battalion, 241st Artillery, Massachusetts ARNG, Major Paul E. Kincaid

1st Missile Battalion, 192d Artillery, Connecticut ARNG, Lieutenant Colonel Charles G. Gleason[53]

4. 52d Brigade Components: January 1, 1969

As of January 1, 1969, the 52d Artillery Brigade (Air Defense) continued to be responsible for the New York-Philadelphia and New England defenses. Firing units constituting these defenses were:

52d Brigade

Highlands AADS, New Jersey

New York-Philadelphia Defense Highlands AADS, New Jersey	New England Defense 24th Artillery Group Coventry, Rhode Island

53. Ibid.

3/43 PH75 Pedricktown, New Jersey
A1 PH41 Clementon, New Jersey
A2 PH41 Clementon, New Jersey
B PH58 Swedesboro, New Jersey

3/51 NY56 Highlands AADS, New Jersey
A NY49 Fort Tilden, New York
C1 NY56 Fort Hancock, New Jersey
C2 NY56 Fort Hancock, New Jersey

2/166 Pa. NG PH99 Warrington, Pennsylvania
A PH99 Warrington, Pennsylvania

1/244 NY ANG Sta Roslyn, New York
A NY24 Amityville, New York
B NY25 Rocky Point, New York
C NY04 Orangeburg, New York

7/112 N.J. NG NY80 Livingston, New Jersey
A PH25 Lumberton, New Jersey
B NY80 Livingston, New Jersey
C NY65 Plainfield, New Jersey
D NY94 Franklin Lakes, New Jersey[54]

3/5 PH19 Rehoboth, Massachusetts
C PR39 Bristol, Massachusetts
D B05 Danvers, Massachusetts

1/192 Conn. NG State Armory Hartford, Connecticut
B HA08 Warehouse Point, Connecticut
D BR04 Ansoina, Connecticut

1/241 Massachusetts NG Supply Depot Natick, Massachusetts
A B73 Lincoln, Massachusetts
B B36 Hull, Massachusetts

2/243 RI NG (No Bn. Hq.)
B PR99 N. Springfield, Rhode Island

I. Changes to Grounds and Buildings

1. Parade Ground Becomes Pershing Field

a. Dedication Ceremony

On Tuesday, September 13, 1960, the centennial of General-of-the-Armies John J. Pershing's birth, there was a program at Fort Hancock, and the parade ground, which had been in use for some 60 years, was dedicated to the memory of the commander of the American Expeditionary Force and the men who served under him. Assisting in the program were officials of various Red Bank, New Jersey, veterans' organizations. Post commander Hollis C. Lewis delivered the dedicatory address and Captain Earle B. Saxe, post chaplain, pronounced the invocation. A presidential proclamation was read by Major George W. Chalmers, deputy post commander. Colonel Harry Elkan, Ret., assisted

54. ACofs, G3, First Region, ARADCOM, January 1, 1969, Files, Sandy Hook Unit, Gateway National Recreation Area.

in unveiling the sign dedicating the parade ground. After the program, the participants had a buffet luncheon in the Brick House (officers' mess). For their enjoyment, a "special war room," exhibiting maps and photographs of the Western Front, was on display in the mess.[55]

b. Pershing Field as a Center of Post Ceremonial Activities

Pershing Field continued to be the focal point for the post's reviews, ceremonies, parades, inspections, calisthenics, and close order drill. In February 1961, at a Pershing Field ceremony, General Daly awarded to two of the 52d Brigade missile batteries--C-1 of the 4th Missile Battalion, 71st Artillery, Fort Hancock, and A-2 of the 5th Missile Battalion, 7th Artillery, Orangeburg, New York--First Region ARADCOM's Distinguished Firing Battery certificates. These certificates were awarded to those batteries achieving a score exceeding 92 percent in the annual firing practice for NIKE missiles at the Army's McGregor Range in New Mexico.[56]

Then, in late July, at a review formation General Daly presented the brigade commander's "Superior Unit Streamer" and pennant to Captain James J. Doherty, commanding Battery A, 4th Missile Battalion, 71st Artillery. In a congratulatory message to the unit, General Daly stated:

> We of the Army Air Defense Command have the responsibility of keeping our personnel and equipment maintained at the peak of operational efficiency at all times. With a duty day that fills the 24 hour time frame, your personnel's appearance and that of your installation are exemplary. The results achieved by your unit on all

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55. Red Bank Daily Register, September 15, 1960.

56. Harbor Watch, February 24, 1961.

inspections during the past year are such as to make all associated with your battery proud.

I am confident that you and the personnel of your battery will continue to produce this outstanding accomplishment and will serve as an inspiration to the entire Brigade.[57]

On August 16, the 389th Army Band (CWO T. O. Hardie, Jr.,) from Fort Monmouth presented an evening concert before more than 150 military, civilians, and dependents on Pershing Field.[58]

On June 13, 1962, Headquarters and Headquarters Battery, 52d Air Defense Brigade, celebrated the 10th anniversary of its reactivation at Pershing Field. Highlights of the day's activities were a buffet and sports contests, with prizes for all members of the unit.[59]

2. Number of Trailer Homes Slashed

In mid-July 1962, post headquarters announced that the number of trailers in the trailer park would be reduced as of October 1 from 52 to 27. This decision had been dictated by continued deterioration of the plumbing and sewer lines serving the park, which were no longer adequate to meet current demands.[60]

3. Mess Hall, Headquarters Battery, 3d Missile Battalion, 51st Artillery

In October 1964, General Clapsaddle "rededicated" the mess hall of Headquarters Battery, 3d Missile Battalion, 51st Artillery.

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57. Fort Hancock Clipping File, August 4, 1961, Files, Sandy Hook Unit, Gateway National Recreation Area.

58. Monmouth Message, September 1, 1961.

59. ARADCOM Argus, August 1, 1962.

60. Long Branch Daily Record, July 11, 1962.

The renovation included installation of new lighting fixtures, a new ceiling, and new decor. The work had been done under supervision of SFC Kurt Green, Headquarters Battery mess sergeant, and S Sgt. Victor Young.[61]

J. Visits by Senior Officers

1. General Wood Tours Fort Hancock

Late in August 1960, Lieutenant General Robert J. Wood, who had recently replaced Lieutenant General Charles E. Hart as commander of ARADCOM, spent three days in the New York metropolitan area visiting Fort Hancock and other First Region sites.[62]

2. General Hashimoto Sees the Facilities

On December 2, 1960, Major General Masakatsu Hashimoto, deputy chief of D-5, Ground Staff Office, and his aide Lieutenant Colonel Hisatomo Matsukane, of the Japanese Defense Force, and a captain in the United States Army arrived at Fort Totten. At Headquarters, First Region, U. S. Army Air Defense Command, the two senior Japanese officers were welcomed by Major William F. Barron of the 52d Artillery Brigade, their escort and assistant operations officer at the Highlands Air Force Station Missile Master System. After being briefed, the party boarded a helicopter and flew to Fort Hancock. There they were met by General Daly.

They then traveled to the Highlands Air Force Station, where the Army and Air Force maintained a joint facility charged with coordinating the air defense of the New York City metropolitan area. The Japanese were shown the multi-million dollar Missile Master system, which "electronically controls and distributes the firing of NIKE missile batteries and is capable of distinguishing enemy targets from friendly ones with extreme speed and accuracy."

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61. ARADCOM Argus, December 1, 1964.

62. New York Times, August 23, 1960, p. 13.

General Hashimoto, after being briefed by Major John J. Montgomery, watched a simulated air defense mission and site selection. Later, Hashimoto and General Daly reviewed the mission of the 52d Artillery Brigade, command relationships, and overall operations of an army command post.

Next, General Hashimoto and his party visited NIKE-HERCULES missile Battery C, 5th Missile Battalion, 7th Artillery, at Livingston, New Jersey. There they were given a site orientation, consisting of an explanation of the unit's mission and a tour of the facility. A general description of the duties of the personnel was made known, as the crew manned their equipment during a drill. In the launching area, General Hashimoto viewed the assembly and refueling procedures involved in readying an AJAX missile for firing. He was also instructed in missile maintenance. At the end of the day, the Hashimoto party was returned to New York's 30th Street Heliport by helicopter.[63]

3. The August 1961 Brigade Commander's Conference

In August 1961, a brigade commander's conference was held at Sandy Hook and Highlands Air Force Station. This permitted officers of the recently joined New York and Philadelphia defenses to become acquainted with their role in the 52d Brigade.

The conference was attended by Brigadier General Arthur Bertolett, Commanding General, 51st Air Defense Artillery Brigade, Pennsylvania National Guard; Colonel Ralph J. Grimsley, Philadelphia Deputy Defense Commander and 24th Air Defense Artillery Group Commander; and Colonel James N. Hickok, New York Deputy Defense Commander. Also in attendance were all active Army and National Guard battalion commanders in the revised 52d Brigade area; state air defense officers from the New York, New Jersey, and Pennsylvania National Guard; and advisors and supervisors of the National Guard battalions in this trio of states.

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63. Harbor Watch, December 9, 1960.

Topics presented during the conference concerned 52d Brigade policy and how it affected defense of the New York-Philadelphia corridor. Each staff section chief explained how brigade policy affected his section and how it would affect it in the future. At the closing session, General Daly presented a summary of the policy as outlined by the other speakers and stressed unit pride, responsiveness, and safety. Participants and their wives attended a reception at Fort Hancock's Brick House.[64]

4. Colonel Foreman Inspects the Post

On Thursday, January 18, 1962, Colonel Allen H. Foreman, recently appointed First Army Deputy Chief of Staff, made an official visit to Fort Hancock. He was met at the heliport by Colonel McArdle. While on post, Foreman was thoroughly briefed on its operations and functions. McArdle then gave Foreman a tour of the reservation and the Highlands. At the latter, Foreman visited the Missile Master.[65]

5. General Davidson Spends the Night on Sandy Hook

Five months later, on July 9, Lieutenant General Garrison H. Davidson, the First Army's commander, made his first visit to Fort Hancock since assuming command in April. Accompanied by Colonel McArdle, Davidson toured on foot the special services section, the army education center, the post engineer offices and shops, and various historic sites. At 10 a.m., Davidson inspected the new south gatehouse, the soon-to-be completed provost marshal's office, and the recently opened Sandy Hook State Park.

General Davidson spent the night on post. He was met at his temporary quarters early on the 10th by Colonel McArdle who briefed

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64. ARADCOM Argus, September 1, 1961.

65. Monmouth Message, January 25, 1962; Red Bank Daily Register, January 22, 1962.

him on Fort Hancock's mission. Later, the post officers were assembled at the administration building and introduced by Colonel McArdle to the general. At 7 p.m., Davidson departed Fort Hancock by launch for Governors Island.[66]

6. General Hackett's Visit

On May 20, 1968, the Commanding General of the United States Air Defense Command (ARADCOM), Lieutenant General Robert Hackett, was on post and a guest at a reception in his honor at the Fort Hancock Officers' Club (Brick House). At the function, General Hackett received the 52d Artillery Brigade's staff officers and their wives and the officers and wives from the 3d Battalion (NIKE-HERCULES), 51st Artillery. General Hackett was in the area visiting regular Army and National Guard NIKE-HERCULES missile batteries in the New York-Philadelphia corridor.[67]

K. Fort Hancock Soldiers Combat Natural Disasters and Aid Distressed Civilians

1. Hurricane Donna Ravages the Area

Hurricane Donna, on September 12-13, 1960, lashed the Jersey shore. There were 10-foot tides, torrential rains, and 100-mile-an-hour winds. The downtown area of Highlands was flooded to a depth of 6 to 8 feet. Within 30 minutes of receiving a call for assistance from the mayor's office, personnel from the U. S. Air Force's 646th Radar Squadron and the Army's 52d Artillery Brigade were at the scene. Uniformed men waded in waist- and chest-deep water to maneuver rescue boats in gale-force winds.

Mayor C. J. Guiney, Jr., directed the rescue teams and civil defense activities on the scene, as service personnel and civilians

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66. Long Branch Daily Record, July 10, 1962. The state had funded and contracted the construction of the gatehouse and provost marshal's office.

67. Nike-Sage Brush, June 1968.

worked hand-in-hand. Two teams from the Highlands Air Force Station, working with small boats, rescued at least 30 families trapped by the surging tide. Army personnel transported the flood victims to one of three rescue aid centers--the Highlands Air Force Station theater, in a World War II ammunition bunker; the local high school; or near the downtown area.

An expectant mother was reluctant to leave her home. After learning that the woman had fallen and was experiencing labor pains, the airmen persuaded her to accompany them to safety. They evacuated her by boat to higher ground from where an ambulance rushed her to the station dispensary. At the dispensary, Mrs. Carol Frechette, a registered nurse and the wife of 1st Lieutenant George G. Frechette, the 646th's radar maintenance officer, made the woman comfortable. Mrs. Frechette was assisted by T/Sgt. Joseph J. Rose, noncommissioned officer in charge of the station dispensary.

A/IC Bernard R. Roux and A/2C Richard Kay, 646th's medics, aided in the rescue operation and assisted the injured, both in and out of the water. One man, cut on the wrist by a motorboat propeller, was given first aid by Roux at the scene, taken by boat to higher ground, and rushed to safety by ambulance.

Many of the 75 people rescued by the military were elderly and women with small children. SFC Leon Gaudet of the 52d Brigade's motor pool, who dispatched five vehicles to the scene, recalled, "Some people tried to offer us money, of course we refused it." A woman exclaimed, "The Army and Air Force . . . [are] real nice to the people, they fight our wars, and, help us in time of need."

Executive Officer Captain James C. Bennett of the 646th Radar Squadron recalled:

> It was terrible, we never expected to be hit so hard. But we were properly prepared for it, food had been stored in the theatre, loose objects on the station were taken inside or tied down, and all of our people, on and off-duty were alerted.

From mid-morning until about 1800 hrs. personnel from the Air Force and the Army assisted the local rescue workers. The quick action on the part of our commander, Maj. Weston F. Griffith and the 52nd Artillery Brigade Commander, Col. John H. Daly, in sending personnel to assist in evacuation, was a major contribution to the smooth operation.

Very few persons were injured . . . and those who were injured, received quick medical attention.

By Tuesday morning, the storm had passed, leaving in its path millions of dollars of destruction. That evening, the news reached the Highlands Air Force Station and Fort Hancock that the expectant mother, rescued only hours before, had given birth to a daughter. The baby's name was Donna.[68]

Highlands Mayor Guiney, as was to be expected, wrote Colonel Daly, commending the military for help extended. He also informed U. S. Representative Auchincloss that the action of the Army and Air Force "was undoubtedly the reason that a more serious catastrophe has been avoided."[69]

2. March 1962 Storm

A savage late winter storm hammered the Jersey coast at the beginning of the second week of March 1962, causing severe flooding and forcing government employees on the Hook to lose two days of work. At the southern approach to the recently opened state park, sand drifted to a height of several feet.

On Monday night, the 6th, while the storm raged, the sentry posted at the south gate saw waves clearing the seawall and

68. Harbor Watch, September 23, 1960.

69. Guiney to Daly, undated, found in ibid.

breaking across the roadway. He held his ground until "big boulders started pounding on the roof of the gatehouse," when he deserted his post.[70]

3. South Amboy April 27, 1962, Brush Fire

On Wednesday night, April 26, 1962, fires swept through tinder-dry brush in the South Amboy area, threatening the installation manned by Battery A, 4th Missile Battalion, a unit supported by Fort Hancock. To combat the fires, more than 100 Fort Hancock soldiers were rushed to the area and spent Wednesday night and Thursday morning assisting volunteer local fire companies. After the blaze was brought under control, the soldiers were kept on standby through Friday to insure that "no fresh fires sprung up from sparks in the area."[71]

4. Officers Rescue Sandy Hook Bay Boaters

On August 15, 1964, quick thinking and lightning-like reflexes by Lieutenant Colonel Herbert Graver, commanding officer, 3d Missile Battalion, 51st Artillery, and Captain Bruce T. Grannan, Headquarters, 52d Brigade, averted a boating tragedy. Colonel Graver, as he sat on his Officers' Row porch, saw a sailboat capsize about a quarter mile offshore. He called his neighbor, Captain Grannan, and then telephoned the coast guard and provost marshal.

Seeing that the sailors were in danger of drowning before help arrived, the two officers raced into the bay and helped two youngsters (the sons of Lionel Wolpert and Murray Margolin) reach shore. After the rescue, the two boys were taken to Captain Grannan's quarters, where they were given dry clothing borrowed from the neighbors. Meanwhile, Colonel Graver arranged for medical assistance for Mr. Wolpert, whose legs had been badly gashed by rocks in the bay.

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70. Long Branch Daily Record, March 8, 1962.

71. Ibid., May 1, 1962.

After the quartet had recovered from their ordeal, a military police vehicle returned them to their car at the Highlands.[72]

5. Two Enlisted Men Awarded the Soldier's Medal

In December 1965, there was an awards ceremony at Fort Hancock, when Major General James F. Cantwell of the New Jersey National Guard decorated Sp4 LeRoy R. Purdy and Sp4 Arthur M. McCallen with the Soldier's Medal, the Army's highest non-combat award for heroism. The duo, members of Battery C, 1st Missile Battalion, 245th Artillery, New Jersey ARNG, were cited for the rescue of a woman and a police officer from a burning dwelling near the battery.[73]

L. A Joint Venture: The Nike-Sage Brush

On March 24, 1961, the Nike-Sage Brush, a publication serving Headquarters and Headquarters Battery, 52d Air Defense Brigade, and the brigade's 25 NIKE missile sites in the greater New York area and the Air Force's 646th Radar Squadron, made its appearance. The first issue of the Nike-Sage Brush closed a six-year association by the 52d Brigade with Fort Wadsworth units in publication of The Harbor Watch, an award winning bi-monthly. Brigadier General John H. Daly and Air Force Brigadier General Gilbert L. Pritchard, Commanding General, New York Air Defense Sector, in a joint-commanders' message, noted, "We desire to express our highest regard for the spirit of interservice cooperation and mutual motivation which made possible this undertaking."[74]

M. Bringing a College Education to the Military

In mid-February 1962, after five months of negotiations by a team headed by Colonel McArdle and Rutgers Deans Ernest E. McMahon and Madison Weidner, a program for university evening classes was

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72. ARADCOM Argus, October 1, 1964.

73. Ibid., January 1, 1966.

74. Ibid., May 1, 1961.

inaugurated at Fort Hancock. Two accredited courses--American Government and Introduction to College Mathematics--would be taught by members of the Rutgers faculty. Classes would meet on Monday and Thursday evenings in the army education center (Building 24). The student body would be drawn from personnel of the 4th Missile Battalion; Headquarters, Fort Hancock; Headquarters, 52d Artillery Brigade; and Highlands Air Force Station. The plan of bringing the university to the military was devised to make a college education available to Fort Hancock personnel desirous of furthering their education.[75]

N. Traffic Deaths and Safety Campaign

On the evening of March 15, 1962, Private Allen R. Small was killed, when he lost control of his car as he was returning from Seabright to the post. The 21-year-old soldier had driven down to Seabright, where he had appeared before a magistrate, who had fined him $30 on a disorderly conduct charge dating to February 27. Small, driving at a high rate of speed, was thrown from his car, when it skidded and crashed into a driveway abutment at 200 Ocean Avenue.[76]

Some four months later, on July 5, Sergeant Robert L. Goedert was involved in a serious accident, when his car hit two trees and a telephone pole in Long Branch. The sergeant and his wife were injured, and a passenger in their car, Mrs. Bonna L. McDonald, killed. The sergeant was charged by the police with drunken driving and causing a death with an automobile.[77]

General Vann, as commander of the 52d Brigade and cognizant of the number of service men and women killed and injured in traffic accidents, pledged himself and the people of his command to help

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75. Monmouth Message, January 30 and February 15, 1962.

76. Red Bank Daily Register, March 16, 1962.

77. Asbury Park Evening Post, July 6, 1962.

make the summer of 1966 the safest driving months in the nation's history. Lending support to the pledge were Colonel Dan W. Johnson, deputy post commander, and 2d Lieutenant Joseph E. Pierce, 52d Brigade Safety Officer.[78]

O. Urban Children Spend a Day at Fort Hancock

On Monday, July 30, 1962, more than 100 deserving urban children, then spending two weeks with various Monmouth County families, were bused to Fort Hancock as guests of post personnel. The youngsters, sponsored by the Long Branch Exchange Club and the Fresh Air Fund, were welcomed by Colonel McArdle. Unable to remain with the group for the entire day, the colonel delegated Lieutenant Godfrey Harris to represent him.

The children, besides bathing under the watchful eyes of lifeguards, were taken for a boatride around the Hook on the Fort Dix Special Service craft. They were served a meal on the parade ground by personnel from Battery C, 4th Missile Battalion. PFC Ronald Schettini, who was on KP, remarked, "I'm from New York and get a thrill seeing those kids having such a good time. I know what it means to them."

After being taken for a ride in the fire truck, the children boarded two buses for a tour of the reservation. Passing the missile tracking area, one lad "likened the antennas to big mushrooms with their umbrella-like tops." CWO Del La Dou then cautioned, "You have to be cleared again and then some to get on the missile site." Those "rubber coated bubbles inflated with air as though they were about to go into orbit," house radar. "The business of one radar is to pick up enemy aircraft--the other tracks the missile itself," La Dou explained. "Then information from the radars are put in computers which figure out at what point the aircraft will be when the missile gets there. When the

78. ARADCOM Argus, July 1, 1966.

missile is fired, the radio sends commands to the missile to guide [it] toward the aircraft."

The youngsters were amazed as to how independent Fort Hancock was with its own police, fire department, theatre, etc.

Music from the parade ground drew attention in the late afternoon to flags flapping and soldiers passing in review to honor Major Chalmers, deputy post commander, who was retiring from the Army. Before leaving the reservation, the children were given gifts by members of the Exchange Club.[79]

P. Senior Stock Exchange Members Tour Post

Late in the summer of 1962, the 52d Air Defense Artillery Brigade hosted senior members of the New York Stock Exchange during their visit to the NORAD Control Center and the NIKE-HERCULES sites at Fort Hancock. While in the New York Army Air Defense Sector, members of the Exchange were given a description of NORAD and a tour of the missile master center. Climaxing their visit was a tour of the NIKE-HERCULES launcher area, where they viewed fire control equipment and had an opportunity to watch a simulated fire mission by personnel of Battery C, 4th Missile Battalion. General Weld acted as escort officer for the people from the Exchange.[80]

Q. Army Personnel and Marine Laboratory Employees Exchange Visits

In May 1963, officers of Battery C and personnel of the Sandy Hook Marine Laboratory participated in a program featuring an exchange of ideas and information. Army officers visited the laboratory, which had

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79. Long Branch Daily Record, July 20 and 31, 1962.

80. ARADCOM Argus, September 1962.

81. Ibid., June 1, 1963.

recently opened in the former post hospital, and then hosted a tour by laboratory employees of the launcher site.[81]

R. Armed Forces Days and Other Tours of Sandy Hook

1. In 1963

a. Introducing the HIPAR Radar

"Power for Peace" was the theme of the 14th annual observance of Armed Forces Day, which took place at Fort Hancock on Saturday, May 18, 1963. Post visitors were permitted to inspect at a distance the NIKE-HERCULES missiles and the High Power Acquisition Radar (HIPAR) equipment. Major Paul E. Jones, commander of the 4th Missile Battalion and recently returned from South Vietnam, was particularly proud of the latter, an up-to-date high powered acquisition radar.[82]

Some 23 months before, the Department of Defense had informed the media that a new longer range radar, with better capability for pinpointing targets, was in production for deployment in conjunction with the NIKE-HERCULES system. The new radar, designated High Power Acquisition Radar, would "reach out substantially in excess of the present radar equipment." This was important, because the range of the HERCULES depended "to some degree on the range of the radar that located its targets."[83]

The HIPAR radar had been installed at Fort Hancock in the autumn of 1962, and consisted of four units--two tracking towers (structures 472 and 473), a HIPAR building (468), and a HIPAR tower (469).[84]

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82. Long Branch Daily Record, May 13, 1963.

83. New York Times, April 30, 1961, p. 55.

84. Real Property Record Cards, Structures 468-69 and 472-73, Files, Sandy Hook Unit, Gateway National Recreation Area.

During the tours, Major Jones explained that HIPAR with its ultramodern equipment could penetrate any type of hostile jamming to hone in on its target. It was capable of picking up a target at a range of more than 200 miles. HIPAR, he continued, did not nullify the usefulness of the basic acquisition radar, but supplemented the surveillance capability of the system and enhanced the performance of the Fort Hancock NIKE-HERCULES battery. HIPAR was supersensitive and once it locked in on a bogie, any structure or other object which intervened would cause the beam to jump off target for a fraction of a second. Consequently, it would be impossible for the state to acquire any additional land for expansion of the Sandy Hook Park between the radar tracking site and the missile launching area.[85]

b. Major Jones Reviews Housing Problems

Major Jones informed the press that, at present, his battalion was over-strength. In turning over the South Plainfield site to the New Jersey National Guard, he had retained the extra men as supernumeraries. Currently, there were 341 officers and men from the battalion assigned to Fort Hancock, which was 20 more than called for by the tables of organization. There was a major problem in providing housing for married personnel. Normally, Jones added, they must live within ten minutes driving time of a missile site, but the Department of Defense was planning to waive this requirement and extend it to 20 miles. Some of his officers lived in Officers' Row and the others in the trailer park, while bachelor enlisted men were housed in the two-story brick barracks.[86]

2. Navy League's 1966 Tour

In May 1966, more than 200 members of the Jersey Shore Council of the Navy League toured the area. The group was hosted by General Vann, attended briefings at the fire control and Fort Hancock

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85. Long Branch Daily Record, May 13, 1963.

86. Ibid.

launching areas, and toured the Missile Master Direction Center at the Highlands.[87]

3. May 20, 1967, Reservation Tour

To celebrate Armed Forces Day on Saturday, May 20, 1967, there was again an open house at Fort Hancock and the Highlands Army Air Defense Site. This was the only occasion during the year that operational NIKE-HERCULES air defense units could be visited by the general public. Special bus tours and briefing teams were organized and placed on standby to be available for visitors desirous of inspecting the status of their air defense forces.

Battery C, 3d Battalion, 51st Artillery, held its open house on Sandy Hook from 10 a.m. to 3 p.m. Visitors boarded the escorted buses at the Sandy Hook State Park parking areas. At the missile launching site, they were conducted on a tour of the battery and viewed a NIKE-HERCULES missile. Battery C personnel explained the function of their equipment and "today's air defense system."

After reboarding the buses, the visitors were given a tour of the Fort Hancock reservation. As the buses traveled slowly through the post, guides pointed out: The Hally Burton Memorial, the Old Service Club, the Marine Laboratory, Quarters 12 and 13, the post theater, St. Mary's Chapel, and the 20-inch Rodman. Following a 30-minute stop at the coast guard docks, the visitors reboarded the buses. The drive was continued past the First Army Recreation area, the Brick House (Officers' Club), NCO Club/Fire House, post library, post headquarters, Pershing Field, Headquarters 52d Artillery Brigade, and the Sandy Hook lighthouse. Before returning to the state park, the visitors debused at Battery C's mess hall for tea and crumpets. At the Highlands, the public was given conducted tours of the "complex control equipment used by the

87. ARADCOM Argus, June 1, 1966.

Army in coordinating the fire of NIKE-HERCULES batteries in the New York-Philadelphia Defense."[88]

S. First Army Recreation Center

1. Its Establishment

On May 23, 1965, First Army spokesmen announced that a beach site and recreation area would be opened at Fort Hancock on Memorial Day and close on Labor Day. The facilities would be available to both active and retired service people and their families. Reservations for quarters would be made through the Fort Jay Special Service Officer and were to be limited to seven days. Quarters were austere, but comfortable, and consisted of bedroom-living room suites with bath. A dining room was near the housing area, and served breakfasts and suppers. The menu was ample and the prices reasonable--about one dollar for a "full meal." Fishing from the dock or from powerboats was available for those interested. Surf fishing rods could be rented at a nominal cost, as well as other sporting equipment, i.e., bicycles, golf clubs, etc. A snack bar was open during hours of beach operation.[89]

2. Facilities and User Fees in 1972

On March 9, 1972, Post Commander Herbert W. Hayes announced the ground rules covering operations of the First Army Recreation Area for the May 26 through September 7 season. Among the facilities available were: (a) 20 three-bedroom trailers, an increase of ten since 1971; (b) 37 rooms in BOQ-type buildings; (c) a community building containing shower and latrine facilities; (d) 30 trailer camping sites; (e) approximately 1,500 feet of Atlantic Ocean beach; (f) areas for surf fishing; (g) dock area for bay fishing and crabbing; (h) beach

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88. Long Branch Daily Record, May 16, 1967; Highlands Star, May 19, 1967; Asbury Park Evening Press, May 15, 1967; Disposition Form, Armed Forces Day, April 13, 1967; Cue Cards for Guides, Files, Sandy Hook Unit, Gateway National Recreation Area.

89. Red Bank Daily Register, May 24, 1965; Fort Hancock: Unofficial Guide and Directory (Lubbock, Texas, 1966), p. 19.

house with snack bar; (i) recreation hall with ping pong and pool tables, vending machines, etc.; (j) beach umbrellas and bicycles for rent; (k) picnic areas with tables and grills; and (l) a variety of outdoor recreational facilities such as horseshoes, basketball, tennis, etc. Charges would be: trailers, $3 per night; trailer camping sites, $2 per night; and BOQ-type rooms, $2 per person per night.[90]

3. Facilities, Costs, and Activities in 1973

In 1973, the recreation area was in operation from May 1 through Labor Day, although the swimming beach did not open until June 9. Accommodations for up to a week could be had by those desiring to stay overnight. There were 20 furnished three-room mobile homes, each of which could sleep up to seven persons. These homes included a fully-equipped kitchen with all necessary cooking and eating utensils. Bed linens were provided, and occupants had only to bring towels, toilet articles, and food. The mobile homes now rented for ten dollars per night.

Less elaborate overnight accommodations were available in World War II era barracks. Minimal furnishings were provided, including bedding, dressers, and sitting room furniture. Rooms could be interconnected for family groups. There were no cooking facilities, and only community latrines and showers were available. Cost was $2 per night per person up to a maximum of $8 for a family of four or more.

For campers, there continued to be an area provided for self-contained trailers, pickup campers, and motor homes at $2 per night (the same as in 1972). Tenting was not permitted. Water hookups and a dumping station were available, along with latrine/shower facilities. In addition, a new utility building, to house facilities for washing clothes, was under construction.

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90. Talking Paper, March 9, 1972, Files, Sandy Hook Unit, Gateway National Recreation Area.

Overnight accommodations were only a portion of the facilities available at the Fort Hancock Recreation Area. The administration office had a number of assorted games and sporting equipment for use of guests. Bicycles were available at the Recreation Area office. Boats could be rented at the nearby Highlands Army Air Defense site for boating on the Navesink River. Arrangements could be made for deep sea and surf fishing. For those enjoying the beach, there was a bath house and snack bar. Adjacent to the beach was a picnic area with tables and grills.[91]

4. Construction, Rehabilitation, and Maintenance of Improvements

a. Beach House (Structure 179)

In fiscal year 1961, a beach house was erected at a cost of $18,106. The 30- by 44-foot, 8-inch concrete block structure, with a 6-foot, 8-inch by 10-foot, 8-inch offset, had a built-up roof and a concrete floor. On the post inventory, the bath house was assigned number 179. Four years later, in the summer of 1965, a hood was positioned over the bath house grill. In fiscal year 1969, a 1,220-square-foot addition was made to the structure. Additional showers were installed, and partitions positioned for men's and women's dressing rooms and toilets.[92]

b. Buildings S164-70

In 1964, from $4,469.79 to $5,853.21 was spent to rehabilitate Buildings S164 through S167 as First Army Recreation Area guesthouses. Then, in 1966, $530 was disbursed to introduce heat into the second floor of guesthouse S167. In 1964, $801.54 was spent to rehabilitate Building S168 as the recreation area's open mess. Six hundred dollars was employed in 1964 to rehabilitate S169, a World War II

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91. Monmouth Message, June 7, 1973.

92. Real Property Record Cards, Building 179, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

mess hall, as the recreation center administration building. Four years later, security screens and windows were hung. In 1964, $1,352 was spent to convert S170 into the area's lounge.[93]

c. Utilities for Mobile Homes Installed

In fiscal year 1971, utilities for ten mobile home sites were installed at a cost of $15,189. During the ensuing fiscal year, utilities for an additional ten mobile home sites were positioned for $14,653.[94]

d. Construction of Laundry and Public Toilet (Building T157)

During fiscal year 1973, the year before the fort was deactivated, a laundry and public toilet for use of people enjoying the recreation area was constructed at a cost of $29,927. The 72- by 25-foot concrete block structure was sited midway between the park for the 20 mobile homes and the World War II frame barracks. The new structure had concrete foundations and floors, was roofed with asphalt shingles, and was assigned number T157 on the post building inventory.[95]

T. Highlights of Life on the Post: June 1968-December 1969

1. Thirty-Five-Year Veteran Re-enlists

On June 11, 1968, Sergeant-Major Melvin Bonsall, a veteran of more than 35 years' service, re-enlisted in the Army. Sergeant Bonsall of the 3d Battalion, 5lst Artillery, had entered the service at Camden, New Jersey, in 1932. Upon completion of basic

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93. Real Property Record Cards, Structures S164 to S170, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

94. Real Property Record Card, Structure D79, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

95. Real Property Record Card, Structure T157, Fort Hancock, and drawing "Fort Hancock Recreation Area, Fort Hancock, N. J.," Files, Sandy Hook Unit, Gateway National Recreation Area.

training, he had been ordered to the Philippines, being assigned to the 59th Coast Artillery on Corregidor. In 1940, Sergeant Bonsall had returned to the states to be assigned to Battery F, 52d Coast Artillery, then stationed at Fort Hancock. In April 1941, he had been ordered to Bermuda.[96]

2. WNBC News Staff Spends Day Filming TV Documentary

On February 18, 1969, six members of the news staff of WNBC of New York City spent the day at Fort Hancock, with Battery C, 3d Battalion, 51st Artillery. The media people's mission was to record on film various aspects of a NIKE-HERCULES unit in action to be used in conjunction with footage taken at First Region, ARADCOM, and at SAGE on the 17th. The films were to be spliced together as a documentary for viewing on television in the near future.

Captain Steven Eisenburg, the battery commander, and brigade information officer, 1st Lieutenant Jon Leider, accompanied the newsmen as they filmed the battery, launching area, missiles, sentry dogs, fire control area vans, and radar domes. They also took a number of panoramic shots of the cold, wind-swept beaches and rolling scrub-covered dunes surrounding the launch area.

Battery C personnel acted out their roles for the camera people "exactly" as they would do it in a combat situation. The newsmen were amazed at the vast quantity of sophisticated gear involved in the operation of an ARADCOM unit. They enjoyed the meal served in the company mess hall. "Their only complaint was the icy cold wind that unceasingly blows across Sandy Hook Peninsula, C Battery's location."[97]

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96. Nike-Sage Brush, June 1968.

97. Ibid., February 1969; ARADCOM Argus, June 1969.

3. National Commander Feuereisen Confers with Fort Hancock Officials

On February 25, Charles Feuereisen, National Commander of the Jewish War Veterans, and other national, state, and county Jewish War Veterans Officers, spent the day at Fort Hancock and the Highlands Army Air Defense site. Their welcome included a visit to the Fort Hancock Service Club, discussions with General Safford and Fort Hancock Post Commander Lieutenant Colonel John T. Rice, a tour of the Highlands Army Air Defense site, lunch at the Fort Hancock Officers' Club (Brick House), and a tour of Battery C, 3d Battalion, 51st Artillery's facilities.[98]

4. Major Norvell Assumes Command of Battery C

Three weeks later, on March 18, Major Frank C. Norvell relieved Captain Eisenburg as commander of Company C, 3d Battalion, 51st Artillery, and its dual launching sites. Captain Eisenburg was reassigned to battalion headquarters. Norvell was a 1958 Virginia Military Institute graduate and a veteran of the Vietnam fighting.[99]

5. 52d Brigade Celebrates 17th Anniversary

On June 13, the 52d Artillery Brigade celebrated the 17th anniversary of its reactivation. As of that date, the troops of Headquarters, 52d Artillery Brigade, and Headquarters, 3d Battalion (HERC), 51st Artillery, were based at the Highlands. These units were dependent on Fort Hancock for logistical support. This support was provided by Battery C, 3d Battalion, 51st Artillery. Personnel of the units quartered at the Highlands looked to Fort Hancock for housing and their officers' club. The monthly parades and ceremonies continued to be held on Pershing Field. As of its anniversary, the 52d was the largest brigade in the Air Defense Command, providing protection, through its 21

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98. Nike-Sage Brush, March 1969.

99. Ibid.

fire units, for an 80,000-square-mile area in six states, populated by 40 million people.[100]

6. Monmouth Chapter AUSA Tours Fort Hancock

In July 1969, 80 members of the Monmouth County Chapter of the AUSA spent the day at Fort Hancock and the Army Air Defense Command Post at the Highlands. The group was met by Major Marvin Bihn, 52d Brigade security officer, who took the AUSA members up onto the Battery Potter terreplein. From this commanding position, Bihn gave an interpretive lecture on the military history of Sandy Hook from Henry Hudson to the NIKE-HERCULES and pointed out and identified significant sites.

Before proceeding to the Brick House, the group visited the launching control and integrated fire control areas manned by Battery C, 3d Missile Battalion, 5lst Artillery. At the former, a training missile had been set up for display. At the Brick House, they ate and listened to a talk by General Safford, stressing the vital role played by ARADCOM in the nation's defense.[101]

7. Two Senior NCOs Report for Duty

Frank J. D'Amato reported to the 52d Artillery Brigade in July as its command sergeant-major, replacing Sergeant-Major Paul Chesnaky, who retired in August. A veteran of 26 years in the Army, D'Amato, between 1960-66, had been sergeant-major successively of the 19th Artillery Group (Air Defense), Los Angeles defenses; 5th Missile Battalion, 3d Artillery, Pittsburgh defenses; and 2d Missile Battalion, 562d Artillery at Fort Winwright, Alaska.[102]

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100. Ibid., May 1969.

101. ARADCOM Argus, August 1969.

102. Ibid.

Some four months later, in October, Command Sergeant-Major John W. Maxwell reported for duty with Headquarters, 3d Missile Battalion, 5lst Artillery. A 22-year veteran, Maxwell came to his new assignment from duty with the Rhode Island National Guard Advisory Group, Providence, Rhode Island.[103]

8. The Western Expedition and Commemoration

In April 1969, General Safford had escorted a tour of western ARADCOM sites. Designated "Operation Understanding," the group had visited Forts Sill and Bliss, the White Sands Missile Range, and Colorado Springs. Participants inspected many types of air defense and artillery equipment and watched the firing of missiles at the McGregor Range. The trip also included a visit to the Cheyenne Mountain complex, housing facilities of the North American Air Defense Headquarters (NCAB). While at Colorado Springs, they also traveled to Ent Air Force Base, headquarters for ARACOM. At the latter they were guests of Lieutenant General George V. Underwood, Jr., ARACOM's commanding general.

To commemorate the tour, a reunion dinner was held on November 7 at the Fort Hancock Officers' Club (Brick House). Slides of the expedition were shown by the brigade information officer and personal photograph albums were presented to participants by General Safford.[104]

U. DOD's Plan to Close Fort Fails

1. Secretary McNamara Announces Plan to Close Fort Hancock

In mid-January 1967, Secretary of Defense Robert W. McNamara told a Pentagon press conference of plans to save more than $37,000,000 annually by merging or phasing out 33 military bases and activities in the United States and six overseas facilities. Eliminated would be more than 1,400 civilian jobs. The 33 stateside cutbacks were

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103. Ibid., November 1969.

104. Ibid., December 1969.

spread unevenly across the nation, with New Jersey, Alabama, Pennsylvania, and Texas each losing three. Informed sources told the press that these cutbacks would also involve transfer of 3,000 other civilian employees and 1,700 military personnel. Department of Defense spokesmen added that all career civilian workers, whose positions would be abolished by these actions, would be offered different jobs by the Pentagon.

The New Jersey sites earmarked for closure were Fort Hancock; the Naval Supply Center, Bayonne; and the Naval Supply, Research and Development Facility, likewise in Bayonne. At Fort Hancock, the Pentagon proposed to relocate headquarters and associated elements of the Army Air Defense Command at the Army Air Defense Station at the Highlands and other area installations. All operations at the post were to be terminated, some 1,200 acres to be disposed of, and the remaining 434 acres of the reservation to be retained for the NIKE-HERCULES system and for continuing naval operations. Thirty-seven family housing units would be retained. Forty-six civilian positions were to be eliminated and 40 military positions to be released for other requirements. These measures, it was estimated, would result in an annual savings of one million dollars.[105]

2. Representative Howard Expresses Concern

John W. Howard, who on January 3, 1965, had succeeded James C. Auchincloss as Third District Representative in Congress, declared that he was concerned with four aspects of Secretary McNamara's proposal. First, there were the estimated 40 civilian jobs that would be abolished. Howard had accordingly spoken to General Latta, commanding the Army's Electronics Command, at nearby Fort Monmouth. Latta had assured him that Fort Monmouth would absorb these people.

Second, he was concerned about the acreage involved. There were 1,634 acres, of which 746 were part of the Sandy Hook State

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105. Asbury Park Evening Press, January 21, 1967.

Park. The report on the closing of Fort Hancock indicated that the federal government would retain 434 acres for the NIKE-HERCULES sites and certain naval operations, thus permitting the remaining 1,200 acres, which included the state park, to be turned over to the Government Services Administration for disposal.

Representative Howard desired to know what this meant, and had been told that the Government Services Administration would sell the 1,200 acres "at 50 per cent of market price." Howard fumed that all this land

> was purchased by the federal government between 1762 and 1892, and buying the land and buildings and equipment amounted to $11.8 million dollars. This property must be worth now 40, 30, 20 times that on the present market. If the state wanted to try to purchase this for the park, they wouldn't begin to have this kind of money. I think it would be disastrous if this prime piece of property, paid for by taxpayers' money since 1762, were to be made available to private interests.

Howard, therefore, had telephoned Secretary of the Interior Stewart Udall, asking for his cooperation and support in an effort to preserve in public ownership the 745-acre state park, and perhaps the entire military reservation. If anything, Howard told the press, "We need more land there. The State Park is frequently closed early on weekends because it is full."

Third, Howard was concerned about the status of the recreational facilities for First Army personnel at the Fort Hancock beach.

Finally, he was disturbed over reports that the Sandy Hook Marine Laboratory would be shut down. Although he did not object

to consolidation in the interest of economy, he did not believe that a "splendid operation" such as the laboratory should be closed.[106]

3. Governor Hughes Calls for Increase of State Park Acreage

New Jersey's Governor Richard J. Hughes, although attending a conference in Puerto Rico, urged that the United States Government preserve the Fort Hancock acreage earmarked for disposal by adding it to the Sandy Hook State Park. Acting Governor Sido L. Ridolfi, when asked to comment, replied, "We know that the federal government, especially the Department of the Interior, has placed great emphasis on the need for protecting our great natural assets in keeping with President Johnson's program to keep America beautiful." Ridolfi found it "inconceivable that anyone could surrender" any part of Sandy Hook for private commercial uses, "and we would use all of the power of our command to oppose any such development."[107]

4. State Senator Stout Challenges Decision

State Senator Richard R. Stout termed the Defense Department's proposal to close down Fort Hancock as distressing. "Monmouth County," he reminded his listeners, "has long benefitted from the operation of this facility and could continue to reap advantages for its citizens, particularly from the operation of the marine biology and recreational facilities" at the Hook. The shore legislator saw no reason "why all levels of government cannot cooperate to secure both the marine laboratory and additional recreational areas for the present and future benefit of New Jersey and Shore area residents."[108]

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106. "Howard Fights Loss of Labs, Parks, Jobs," Files, Sandy Hook Unit, Gateway National Recreation Area.

107. Asbury Park Evening Press, January 21, 1967.

108. Ibid., January 22, 1967.

5. Colonel Johnson Questions Pentagon's Proposal

Deputy Post Commander Daniel W. Johnson foresaw that the Defense Department's plans, if implemented, would cause problems. For example, the Fort Hancock sewer plant was on the ocean side and the waterworks adjacent to Crab Creek; thus elimination of another 455 acres from the reservation would create serious problems with these utilities. Then, there was the question of responsibility for maintenance of roads and power lines.

Colonel Johnson challenged the Pentagon's statement about the inactivation of the post resulting in an annual savings of a million dollars to the taxpayer. According to the Hancock financial records, the Army had spent only "about $1.5 million" at the post in fiscal year 1967 for civilian payrolls and maintenance. Moreover, he added, it did not make sense to reassign 40 Army men, because there was no unit on post of that size, and a reduction in the Civil Service employees was unwarranted.[109]

6. Representative Howard Calls for a Study

Representative Howard, when apprised of Colonel Johnson's comments, announced that he would ask the Defense Department for an "in depth" report and documentation so that the proposal "will not produce more problems than benefits." Continuing, Howard emphasized that he would also request details on relocation of the 46 civilian personnel "into other federal jobs at the same income level or higher," and eventual use of the 455 acres to determine whether it would be "of the utmost benefit to Monmouth County from an economic and/or recreation standpoint."[110]

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109. "See Fort Hancock Slated for Cutbacks," undated, Clipping File, Sandy Hook Unit, Gateway National Recreation Area.

110. Ibid.

7. Department of Defense Responds

Representative Howard was informed by the Pentagon that the 1,200 Fort Hancock acres scheduled to be abandoned would not automatically revert to the state, if the federal government did not want them. A review of New Jersey laws revealed that an 1846 act of the general assembly, which appeared to give the land back to the state if it were no longer required by the military or public, applied only to "legal jurisdiction" on the Sandy Hook reservation. The law had been enacted to insure that persons on the reservation would be subject to military law. Hence, only the "legal jurisdiction" would revert to the state when Fort Hancock was abandoned.[111]

8. Proposal to Establish a Sandy Hook National Recreation Area Surfaces

To escape such a dilemma, Governor Richard Hughes, New Jersey Senators J. Harrison Williams and Clifford Case, and Representative Howard met with Secretary of the Interior Udall to discuss ways of preserving the reservation for a public park. Out of the meeting came a decision to introduce legislation for establishment of a 1,200-acre national park, thereby preserving Sandy Hook as a national recreational area.

As a result of these discussions, Senators Case and Williams and Representative Howard introduced into their respective Houses of Congress legislation authorizing establishment of the Sandy Hook National Seashore. Such action, Howard informed the press, would enable the Department of the Interior to begin studies and to file a feasibility report on the proposal. Moreover, the legislation would preclude other federal agencies from laying claim to the acreage as surplus. Already, it was rumored that at least one agency was planning

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111. Ibid.

to advance a claim for some of the reservation for other than park and recreational purposes.[112]

Neither H. R. 4117 introduced by Representative Howard nor S.702 sponsored by Senator Case nor S.713 by Senator Williams were considered by the 90th Congress. The measures accordingly died when the 2d Session of the 90th Congress adjourned.[113]

9. Coast Guard Seeks to Expand Its Sandy Hook Acreage

The rumor was correct. In October 1967, the United States Coast Guard, interested in receiving additional acreage on the Hook for an expansion of its facilities, announced that research into deeds dating to 1762 indicated that land on the peninsula, north of a north-south line passing near the 1764 lighthouse, would accrue to the coast guard. According to the deeds and a turn of the century study, it had been agreed that the Lighthouse Board would not order the War Department to relocate its facilities, provided the Corps of Engineers concurred that the Hook to the north of the lighthouse was under the Board's jurisdiction. In view of this situation, a coast guard spokesman

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112. Congressional Record: Proceedings and Debates of the 90th Congress, 1st Session (Washington, D.C., 1967), pp. 1,876, 1,880-81, 1,963. Upon introducing H. R. 4117, Representative Howard placed in the record a copy of a letter from the late President John F. Kennedy to Secretary of Defense Robert S. McNamara, dated September 1, 1961, which read in part, "A prime example of land for which there is urgent nonmilitary need is Sandy Hook, New Jersey, on which Fort Hancock is located. This has one of the few undeveloped long shore lines in the New York metropolitan area.

"Generations of Americans have accepted the importance of using this area as a military reservation in the interest of national security. Defense consideration must, of course, continue to take precedence over other potential utilization. But every effort should be made by the Department of Defense to provide long range plans for suitable public use of Sandy Hook or other parts of the peninsula if your present survey indicates that it is possible as a result of changes in weapons and security requirements." Ibid., p. 1,963.

113. Congressional Record: Proceedings and Debates of the 90th Congress 2d Session (Washington, D.C. 1968).

took the position that, if current studies called for expansion of its presence on the Hook, the guard would block disposal of any land as surplus with the goal of future utilization of fort property if, and when, the Army installation were inactivated.

After a joint Army-Coast Guard conference, the land custody question was referred to Maurice Lustig, Chief of the Corps of Engineer's New York District Real Estate Division. On November 27, Lustig announced that he had carried the investigation "as far as it could in the absence of one document of the utmost importance in determining the ownership question." The missing document was a 1918 agreement between the War and Commerce Departments giving title to the Hook north of the lighthouse to the Lighthouse Bureau.[114]

When attorneys were unable to locate the missing document, which they presumed was never signed, representatives of the Coast Guard and Army met in early May 1968 to hammer out their differences. At the meeting, Coast Guard spokesmen stressed the need for an additional 159 acres of land at Sandy Hook.[115] Nothing, however, came of the Coast Guard's proposal to acquire additional acreage at Sandy Hook, because the 90th Congress failed to enact legislation to establish Sandy Hook National Seashore.[116]

10. Army Cuts Back on Its Use of Fort Hancock

The 434 reservation acres to be retained by the Defense Department, when Fort Hancock was inactivated, would be employed by Battery C, 51st Artillery, for its air defense mission, and by the Coast Guard. By mid-February 1967, details of the cutback were being

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114. Asbury Park Evening Press, November 28, 1967.

115. Ibid., May 8, 1968.

116. Telephone interview, Gary Walz with Edwin C. Bearss, July 9, 1981. Mr. Walz is with the Coast Guard's Real Estate Division on Governors Island.

hammered out by General Vann and his staff. A survey was underway to determine the new reservation boundary. The status of the two Army Air Defense Command headquarters located at Sandy Hook was in the discussion stage. The commands involved were Headquarters, 52d Artillery Brigade (Air Defense), and Headquarters, 3d Battalion, 51st Artillery.[117]

In view of the failure of the 90th Congress to act on legislation establishing a Sandy Hook National Seashore, the Department of Defense retained possession of the Fort Hancock Reservation. Consequently, when the 1st Session of the 91st Congress convened in January 1969, Senator Case introduced S.640 providing for establishment of Sandy Hook National Seashore. In doing so, Case reported that the Advisory Board on National Parks, Historic Sites, Buildings, and Monuments had recently endorsed the proposal to establish the Sandy Hook National Seashore as a unit of the National Park System. Once again, the legislation failed to pass.[118]

11. Headquarters, 52d Artillery Brigade (Air Defense), Returns to the Highlands

It was determined by the Army to transfer brigade headquarters, but to permit battalion headquarters to remain at Sandy Hook for the time being. Accordingly, in September 1967, Headquarters, 52d Artillery Brigade (Air Defense), relocated to the Army Air Defense site at the Highlands. Concurrent with the move, Headquarters, 52d Artillery Brigade, absorbed the responsibilities previously assigned to the 19th Artillery Group, and the 52d Brigade assimilated all personnel and equipment of the 19th Artillery Group, without any interruption of operational readiness.

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117. Nike-Sage Brush, February 1967.

118. Congressional Record: Proceedings and Debates of the 91st Congress, 1st Session (Washington, D. C. 1969), pp. 1,841-42.

Major General Melville B. Coburn, Army Air Defense Chief of the Northeastern United States, in announcing the move, noted that it was part of a reorganization of the two artillery brigades in First Region, ARADCOM.[119]

In December, three months after relocation of Headquarters, 52d Brigade, Fort Hancock became a sub-post of Fort Hamilton.[120]

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119. Nike-Sage Brush, October-November 1967.

120. Ibid., January-February 1968.

V. THE ESTABLISHMENT AND DEVELOPMENT OF SANDY HOOK STATE PARK

A. Pre-World War II Efforts

In the months after the stock market crash of 1929, what was to become a long and frequently frustrating campaign to open Sandy Hook to public recreation was begun. The idea was first championed by Lyle Kinmouth, editor of the Asbury Park Press. Kinmouth employed a 1930 editorial to urge that the Hook be made a state park. A commission was established, chaired by E. Donald Sterner, to study the proposal.

In 1931 United States 3d District Representative William H. Sutphin of Matawan introduced a bill into the 1st Session of the 72d Congress to establish a state park on the Hook. The Sutphin bill died in committee. Soon thereafter, the Army offered to lease to the state part of the Fort Hancock Military Reservation for one dollar a year, only to renege. Undaunted, Kinmouth and Thomas I. Brown of the Red Bank Daily Register pledged renewed support for the project, and a new study commission was constituted.

In 1934 prospects seemingly brightened, when New Jersey Senator W. Warren Barbour informed the local committee that members of the Senate Military Affairs Committee favored the lease by the War Department of part of the reservation to the state for a public park. The rise to power of Adolf Hitler in Germany and the breakdown of collective security in Europe, the Far East, and Africa doomed the Barbour proposal, and the War Department refused to release any acreage.[1]

B. Governor Driscoll Pushes Campaign

1. The McMurray Commission's Study and Report

War came to the United States on December 7, 1941, with the attack on Pearl Harbor, and local dreams and thoughts of a

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1. Asbury Park Evening Press, February 20, 1967.

recreational park on Sandy Hook were held in abeyance for the duration. They were revived in 1949 by rumors that the United States Army was planning to abandon Fort Hancock. Apprised of these stories, United States Representative Peter W. Rodino of New Jersey's 11th Congressional District contacted the Department of Defense. A department spokesman responded that the Army was unable to release any part of its Sandy Hook reservation to the State of New Jersey for establishment of a state park.

There was, Major General Clark L. Ruffner, Chief of the Army's Legislation Liaison Division, informed Rodino a "continuing military requirement for the entire installation." Fort Hancock, Ruffner added, housed a branch of the U. S. Disciplinary Barracks, besides certain facilities operated by the U. S. Air Force. In addition, the military was currently involved in a study to determine how Sandy Hook would fit into a defense scheme for the vital New York City-Philadelphia corridor.[2]

Despite the Army's disclaimer, New Jersey Governor Alfred E. Driscoll, in the autumn of 1949, named a 18-member committee to study conversion of the reservation into a seashore park. When the study group released its preliminary report in January 1950, it proposed establishment of a state park authority to construct improvements and to administer the site. The committee pointed out that the proposed state park would serve tens of thousands of residents of northern New Jersey, many of whom now patronized Jones Beach. Construction of facilities for water sports, boating, fishing, camping, and picnicking, the committe held, could be accomplished at a moderate cost to the taxpayer.

Chairman Wayne D. McMurray told the press that Sandy Hook was an ideal location to attract New Jersey residents and "could be made a recreational center unsurpassed anywhere in this part of the country." By limiting commercial development, there would be no danger

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2. New York Times, July 23, 1949, p. 25.

that other Jersey seaside resorts would lose business to the proposed state park.

In summing up its case, the committee trumpeted:

> Sandy Hook lends itself magnificently to the creation of a state park. One of the priceless assets . . . is the fact that it is bordered on the east by the Atlantic and on the west by Sandy Hook Bay. . . . This makes both surf bathing and still water bathing available and also makes possible construction of a harbor of refuge where small boats may moor.[3]

2. Governor Driscoll Takes Action

Moving rapidly, Governor Driscoll, on April 13, made formal application to Secretary of the Interior Oscar Chapman for transfer to the state of the Sandy Hook Military Reservation for development as a "historic and seafront park."

In his application, Driscoll pointed out that the Army was about to declare Fort Hancock surplus. This application was made in accordance with the United States Code, Article 50, Section 1622, which permitted surplus federal real estate to be turned over without cost to states, where located, for historic memorials. Proposed development, however, must conform to guidelines laid down by the Secretary of the Interior's Advisory Board on National Parks, Historic Sites, Buildings, and Monuments. In addition, the transferred historic properties must be maintained by the state as a historic site for at least 20 years.[4]

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3. Ibid., January 27, 1950, p. 3. Members of the committee, in addition to McMurray, were: United States Senators H. Alexander Smith and Robert C. Hendrickson; United States Representative James C. Auchincloss; Conservation Commissioner Charles R. Erdman; State Senator J. Stanley Herbert; and freeholders Joseph E. Irwin, Hugh Boyd, Frank Cozzoline, Louis H. Farb, John W. Guire, M. Harold Kelly, Samuel Silberblatt, Daniel E. Somer, and E. Donald Sterner; and Mrs. George H. Bodman.

4. Ibid., April 14, 1950, p. 25.

Initially, the Bureau of Fish and Wildlife, which maintained a bird refuge on the peninsula, opposed the transfer. The Bureau modified its position, when state authorities announced that the bird sanctuary could be continued, and proposed developments would not infringe thereupon.[5]

On May 2, 1950, the New York Times, on its editorial page, endorsed the establishment of the state seashore park.[6]

3. Establishment of a Sandy Hook Preservation Authority

The proposal's sponsors were so confident of success that Governor Driscoll prevailed on the New Jersey legislature to enact several bills furthering the goal. One of these authorized the governor to name a five-member Sandy Hook Preservation Authority. The legislation required three of the five authority members to be residents of Monmouth County. A preamble to the law noted that it was being enacted because legislation was pending in Congress to "cede and transfer" Sandy Hook lands to the state. The commission was given broad powers by the legislature to issue bonds and develop and administer Sandy Hook as a state park and recreation area.

A report released by the commission on September 24, 1950, estimated that the development of the park would require an initial expenditure of about six million dollars. An eventual daily visitation of 150,000 was forecast.[7]

4. Korean Conflict Proves a Roadblock

Despite outbreak of the Korean Conflict, the Sandy Hook Preservation Authority continued its efforts to secure at least part of the

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5. Ibid.

6. Ibid., May 2, 1950, p. 28.

7. Asbury Park Evening Press, February 20, 1967; New York Times, June 18, 1950, Section 2, p. 13.

peninsula for public recreation. Park proponents' hopes were chilled on February 8, 1951, when the General Service Adminstration announced that, in response to a request by the Army, a freeze was being placed on plans to dispose of any Sandy Hook acreage. Rescreening of the property for "a specific purpose of a classified nature was underway." This was the second occasion that the Defense Department had reviewed the possibility of reactivating the installation. The first freeze had been effected soon after the outbreak of the Korean Conflict, at which time the armed services, with the exception of the Coast Guard and Air Force, had waived interest in the property.[8]

The commission was undaunted, however. Lease negotiations were undertaken in 1951, and in 1952 predictions were made that a state park would open in June 1953. The legislature accordingly appropriated $500,000 to begin development. These expectations were dashed as the Department of the Army dragged its feet. Governor Driscoll, as he was about to leave office in January 1954, announced that there was now little or no chance of the Hook becoming a state park, because the Army "is still opposed to turning the land over to the state."[9]

C. Governor Meyner--Realist

When Robert B. Meyner took office as governor in January 1954, he declared that, although the state was still interested in receiving the acreage, the budgeted amount of $500,000 was to be reallocated. Hoping, however, to keep the project alive, the governor reappointed Wayne D. McMurray as chairman of the park commission. Early in 1955, Governor Meyner reopened negotiations with the Defense Department, but ensuing conferences with the military were unproductive.

8. Asbury Park Evening Press, February 9, 1951.

9. Ibid., February 20, 1967.

Four years slipped by, and, in May 1959, the Monmouth County Recreation Commission headed by former Mayor Thomas McClintock of Long Branch proposed that the Hook become a county park. Development costs were now estimated at $12,000,000, double the 1950 figure. Though county freeholders generally supported the plan, Director Joseph H. Irwin of the commission said the county could not support development of the entire Hook as a recreational park and urged that the state spearhead the undertaking.

During the next 20 months, there were intermittent negotiations with the Department of Defense, but a new stumbling block arose. United States Representative James C. Auchincloss supported objections by local officials in Rumson, who feared establishment of the park would cause massive weekend traffic jams, because access to the recreation area would be via a two-lane highway.

Then, in May 1961, the influential Asbury Park Evening Press urged that Sandy Hook be developed as a national seashore park, similar to the proposed Cape Cod National Seashore. This was an opportune time, because it was both an election year and planning was underway for commemoration of New Jersey's Tercentenary.[10]

D. Park Proposal Becomes Political Issue

1. James Mitchell Introduces the Subject into the 1961 Campaign

The proposed park soon became a burning political issue. On August 7 former Secretary of Labor James P. Mitchell, the Republican candidate for governor, introduced the subject in a speech at Sea Girt. Mitchell accused the Meyner administration of doing nothing to establish a recreation area at Sandy Hook, which "has lost its value to the military in this age of missiles." He claimed that a public park, within easy access of the majority of the state's residents, could be developed if suitable

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10. Ibid.; New York Times, August 18, 1961, p. 23.

approach roads could be built. He had, Mitchell thundered, "asked our people to begin a study to determine what is needed to create this park," and how "to reactivate the Sandy Hook State Park Commission, which the present administration let die."[11]

The Department of Defense, when asked to comment on Mitchell's speech and what it might portend, announced that the Army considered Fort Hancock and its NIKE-HERCULES batteries a permanent installation. Consequently, the spokesman did not foresee the development of a public park at Sandy Hook in the near future.[12]

The media had little sympathy for the Defense Department. Commenting on the stance taken by the army, the New York Herald Tribune noted editorially that, "the layman may not be competent to judge about this, but it is interesting to note that military opinion has varied from time to time about the indispensability of old Fort Hancock." No one could question, the editor continued, New Jersey's need for a Jones Beach-type public recreation development, and that "Sandy Hook, with all its expanse and accessibility, would be ideal." The newspaper asked, "Is it really an incontrovertible fact that the Army must have and hold this splendid stretch of beach property? Or is this merely obstinacy in possession."[13]

An editorial in the Newark Star-Leader was less charitable. In a column headed, "Occupied Territory," it was pointed out that "Whatever military theory has to say, the layman tends to think that Sandy Hook's attraction to the Army lies more in its value as an officers' club than in its usefulness for warfare." Other sites could be found for

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11. Asbury Park Evening Press, August 8, 1961; New York Herald, August 9, 1961.

12. New York Times, August 18, 1961, p. 23.

13. New York Herald Tribune, August 24, 1961.

its missiles, but no other site "is suited for the development of a North Jersey recreation area on the scale and style of Jones Beach."[14]

2. Kennedy Administration Intervenes on Richard Hughes' Behalf

On August 26, some two and a half weeks after Mitchell had raised the issue, Richard J. Hughes, the Democratic candidate for governor, let loose a bombshell. In a Trenton speech, he announced that he had been informed that New Jersey would soon be able to acquire a major portion of Sandy Hook for development as a park. Continuing, Hughes noted that he and Senator Harrison J. Williams, Jr., had pushed their efforts to convince the Department of the Army to "open most of the military reservation . . . to public use." Word had been received from Washington that the Army had changed its stance and would announce its new position within the next few weeks.[15]

This announcement surprised the Republicans. Representative Auchincloss, when questioned by the press, shrugged his shoulders, and remarked that it was news to him.[16]

President John F. Kennedy had personally intervened on behalf of the state by urging the release by the military of real estate not needed for national security and suitable for state parks. Consequently, on September 6, there was a meeting in Washington attended by Department of Defense officials, Governor Meyner and key members of his staff, and Secretary of the Interior Stewart L. Udall. When the meeting adjourned, the Defense Department, in a carefully worded release, noted that a recent survey "disclosed a continuing present requirement for the Army to retain most of the peninsula."

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14. Newark Star-Leader, August 22, 1961.

15. New York News, August 27, 1961.

16. Asbury Park Evening Press, February 20, 1967.

Officials of the Interior Department and New Jersey authorities had been asked to join in preparation of short- and long-range master plans for development of Sandy Hook as a state park and recreation area. New Jersey officials hailed this unexpected development as heralding the end of a more than thirty-year struggle by the state to gain control of the 1,600-acre peninsula and the ultimate closing of Fort Hancock as a military installation.[17]

3. Secretary of the Interior Udall Visits the Hook and Holds a Press Conference

Governor Meyner directed H. Mat Adams, State Commissioner of Conservation and Economic Development, to meet with representatives of Secretary of the Interior Udall to ready a short-range plan for establishing a 350-acre seashore park on the peninsula.[18] Commissioner Adams promptly identified for the press the area to be transferred under the short-range plan as approximately 350 acres between the Shrewsbury bridge and Spermaceti Cove. It was now merely a matter of working out an acceptable master plan with the Interior Department, Adams added. The two departments saw eye-to-eye on keeping Sandy Hook from becoming "another Coney Island." Multiple use would be the goal. This, in the long-range implications, would include preserving and maintaining the Sandy Hook Lighthouse, preserving the holly forests, permitting birdwatching, preservation of the dunes, and swimming in both the ocean and bay. A lease agreement with the Department of Defense would have to be hammered out, the military allowing the state access to the Fort Hancock reservation. Moreover, the state park acreage must revert to the armed services in event of a national emergency. An important consideration in the planning process, Adams remarked, involved the access roadways converging on Sandy

17. New York Times, September 7, 1961, p. 37; Asbury Park Evening Press, September 7, 1961.

18. Ibid.

Hook. These roads, though a four-lane highway entered the reservation, were already congested.[19]

On September 28 Secretary of the Interior Udall and Senator Williams were on the Fort Hancock reservation for dedication of the Sandy Hook Marine Laboratory. Making a short speech, Udall stated that standing on Sandy Hook he could see the "skyline of the metropolitan area and still be refreshed with fresh air and with a feeling of space. I'm even more impressed than I thought I would be."[20]

Later in the day, at a press conference at the Newark Airport, also attended by candidate Hughes, Udall said he hoped an agreement could be reached within four weeks between the Defense Department and the State of New Jersey, allowing the state to take over the southern quarter of the military reservation. Within another decade, he added, he hoped the state could take possession of the entire peninsula.[21]

4. Secretary Udall's October 25 Bombshell

Secretary Udall was back in Newark on October 25, 13 days before the New Jersey voters would go to the polls. At an airport press conference, with Governor Meyner and Senator Williams in attendance, Udall announced that the Department of Defense would turn over to the state for park development 460 acres of the Fort Hancock reservation. He also reminded the media people that President Kennedy was keenly interested in the New Jersey election. The park, Udall

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19. Asbury Park Evening Press, September 7, 1961.

20. Ibid., September 29, 1961. The laboratory, located in the former post hospital, had been open about a year, and owed its existence to the Marine and Game Bill of 1959. Since taking possession, laboratory personnel had installed a circulating salt water supply system for the aquarium in the basement of the three-story structure. There, laboratory personnel maintained their experimental salt water tanks.

21. Ibid.

continued, would include the southern portion of the reservation, and the 460 acres would be leased to the state at a nominal rental. Governor Meyner stated that further details regarding the park would be released at his morning Trenton press conference.[22]

5. Commissioner Adams Tells of State Plans

At the Trenton conference, Commissioner Adams discussed the state's plan for development of the 460 acres, as well as its long-range scheme. Plans called for the state to spend $100,000 by the summer of 1962 for development of two 800-car parking lots, beach houses, and sanitary facilities. In addition to a half-mile ocean bathing beach, fronting the two parking lots, there would be a smaller beach and a 200-car parking area between the large beach and the toll plaza. Paralleling the seawall from the toll plaza to the south beach would be an area, 4,400 feet in length, reserved for surf fishermen. There would be a 79-acre botanical reserve and a 154-acre wild fowl preserve on Spermaceti Cove. Admission charges to Sandy Hook State Park would be 25 cents per car, plus 25 cents for each person over 12, and 10 cents for every child 5 and over. Under phase two of the development program, $200,000 would be expended to increase the facilities from 6,400 persons per day to 16,000 a day by the spring of 1963. Most of the monies to be disbursed in the 1961-62 budget year--$1.5 million--was scheduled to go into contracts for widening Route 36 between Keyport and the Atlantic Highlands from two to four lanes. This roadway would become the principal access route to the Hook. "A reasonable target date for completion" of the road project, a Highway Department spokesman said, would be the spring of 1963.[23]

6. Senator Williams' October Visit with Colonel McArdle

On Friday, October 26, Senator Williams, accompanied by Fort Hancock Commander McArdle, toured the 460 acres to be

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22. New York Times, October 26, 1961, p. 71.

23. Newark Star-Ledger, October 26, 1961; Long Branch Daily Record, October 26, 1961; Newark Evening News, October 27, 1961.

transferred, as well as the rest of the reservation. Williams told the press that the 460 acres showed "some promise, but the best part is still retained by the Army." He then noted that this park will not be a "honky tonk," but would be "maintained for swimming, fishing, and nature lovers."

As the motorcade passed the missile launching site, Colonel McArdle was heard to say that the NIKE-HERCULES would soon be made obsolete by the NIKE-ZEUS. "Why?" Williams asked. Because the Zeus can be fired from a more protected inland position, the colonel answered.[24] Colonel McArdle was distressed to see his remarks carried in the Daily Record's story of Senator Williams' visit to the Hook. Writing the editor, McArdle noted that his words had been taken out of context and "placed in the article in such a way as to distort their intent." Moreover, he added, "we at Fort Hancock are not in the business of weapons system development and are not privy to the advances made in this highly specialized field."[25]

E. Sandy Hook State Park Opens

1. Department of Defense Leases 460 Acres

Nineteen hundred and sixty-one was a Democratic year in New Jersey, and the voters, on November 7, elected Richard Hughes governor. During the campaign concern had been voiced from several quarters as to terms of the Sandy Hook lease. But none of the politicans were willing to discuss this issue. Then, on December 29, it was revealed that the lease would permit the federal government to reclaim the property "at will." A similar proposal in 1951 had been rejected by the state on the grounds that it would be unable to reclaim its investment in developing the park.[26]

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24. Long Branch Daily Record, October 27, 1961.

25. McArdle to Editor, Long Branch Daily Record, October 31, 1961, Files, Sandy Hook Unit, Gateway National Recreation Area.

26. Asbury Park Evening Press, February 20, 1967.

On January 8, 1962, Governor Meyner traveled to Washington to meet with Secretary of the Army Elvis Stahr, Jr., and sign the lease for the 460 acres to be developed as the Sandy Hook State Park.[27] The terms of the 25-year lease prohibited overnight camping, hunting, carrying firearms, and cutting timber. Although the state would pay no rent, it was required to maintain and protect the land involved to the satisfaction of the Commanding General, First Army. The United States retained the right to cancel the lease in the event of war or national emergency. New Jersey on its part could annul the agreement with ten days' notice. No monetary payment was involved.[28]

2. State Announces Development Schedule

Two days later, on the 10th, the New Jersey Department of Conservation and Economic Development declared its timetable for transforming the 460 acres into the state's newest park. The first major construction project would be building a chain-link fence and gatehouse at the park's north boundary. A 800-car parking lot would be started by late March or early April, and the department anticipated that 400 spaces would be available by July 1. About $160,000 in bathhouse contracts would be let in August.[29]

3. Contracts for Fencing, Provost Marshal's Office, Gatehouse, etc., Awarded

In mid-March a contract was awarded to American Steel and Wire for fencing to separate the state park from the Fort Hancock reservation. The 8,000 feet of 7-foot fencing was positioned by the Division of Forest and Parks.[30]

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27. New York Times, January 9, 1962, p. 18.

28. Highlands Star, January 8, 1962; Asbury Park Evening Press, January 9, 1962; Long Branch Daily Record, January 8, 1962.

29. Long Branch Daily Record, January 11, 1962.

30. Asbury Park Evening Press, March 9, 1962.

Meanwhile, the Department of Conservation and Economic Development had contracted with James W. Hayes, Architect, of Jackson, New Jersey, for plans and elevations for a provost marshal's office and gatehouse. These were to be constructed with state monies at the new south entrance to the reservation to replace the south guardhouse and plaza which were included in the 460 acres under lease to the state. The plans were completed by Hayes on March 3, and soon thereafter reviewed and approved. Contracts were then awarded for construction of the two structures and necessary landscaping.[31]

By late June the fence was in position and the new south gatehouse and provost marshal's office were nearing completion. The gatehouse, costing $2,000, was 7' 4" by 9' 4" and had walls of 8" concrete blocks. The provost marshal's office, erected at a cost of $32,000, was also built of 8" concrete blocks, and was 24' by 60'. Coincidentally, state workmen had rehabilitated the former Spermaceti Cove Coast Guard Station, which would serve as park headquarters.[32]

4. State Park Formally Opens

Meanwhile, on March 1, Commissioner Adams had visited the area and had formally opened Sandy Hook State Park and the New Jersey striped bass fishing season. A good run of stripers was forecast. Fishermen were required to check in at the Army guardhouse at the old south entrance to the Fort Hancock reservation. Present at the ceremony was a delegation from the Middletown Chamber of Commerce. They had a

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31. Real Property Record Cards, Structures 470 and 471, Fort Hancock; Plans for "Provost Marshall's Office & Gatehouse," 4 sheets, March 3, 1962; Files, Sandy Hook Unit, Gateway National Recreation Area.

32. Long Branch Daily Record, June 29, 1962; Asbury Park Evening Press, June 29, 1962; Real Property Record Cards, Structure 470, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area. In November 1967, Fort Hancock workmen erected a windbreak to shield the provost marshal's office.

sound truck and carried placards, protesting the barrier method of widening Route 36.[33]

5. Bathing Facilities Open to Public

It was July 14, two weeks later than anticipated, before the one-half-mile ocean bathing beach was opened. The delay was caused by heavy rains which slowed work on the parking area and other facilities. By 2 p.m., four hours after the first visitor was admitted, the 800-car lot was filled. There were more than 2,000 people on the beach and in the water. The entrance gate was closed temporarily until some of the early arrivals left.[34]

F. Park Expansion and Development

1. Lease of Additional 281 Acres

In June 1964, the park acreage was more than doubled, when President Lyndon B. Johnson announced that the Department of Defense had declared another 281 acres of the Fort Hancock reservation surplus and available for lease to the state.[35] The Department of Conservation leased the acreage, but because of a tight budget took no measures to develop this tract.

2. Expansion of Bathing Facilities

Preparatory to opening of the summer beach season in 1965, the New Jersey Conservation and Economic Development Department completed facilities which more than doubled the park's bathhouse facilities.[36]

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33. Long Branch Daily Record, February 28, 1962.

34. Long Branch Daily Record, July 10, 1962; New York Times, July 15, 1962.

35. Asbury Park Evening Press, February 20, 1967.

36. Newark Star-Ledger, June 27, 1965.

G. 1968: Year of Storms and Red Tides

Nineteen hundred and sixty-eight was a bad year for the state park. In the spring there was a storm which did heavy damage. So much sand was lost that one of the area's two bathing beaches had to be closed for the season.

Then, in August, the Jersey coast was plagued by the red tide--millions of microscopic algae-like sea life believed to be harmful to bathers. "Even on days when we weren't officially closed, because of the Red Tide," Superintendent Richard Riker reported, "our parking lots were empty. We could have used them for airstrips."

In mid-November, a nor'easter hammered the coast. Surf, while the storm was at its height, swept across the narrow neck from the ocean to the bay at a number of points. Road shoulders were scoured and eroded. Gun emplacements and rolls of barbed wire, buried under dunes since the 1920s and 30s, were exposed.

Conservationists were stunned by the loss of the carefully maintained artificial dune line built up over the years. Annually, thousands of discarded Christmas trees had been positioned along the beach to serve as a nucleus for new dunes.

"We lost all our Christmas Tree dunes," Superintendent Riker bemoaned. In addition, the park lost about 4,000 feet of snow fencing to the angry seas. Like the trees, the fencing had been placed on the beach in an effort to retain and stabilize drifting sand." Discussing the damage with the media, Superintendent Riker observed, "the situation is serious. We are down to our last defense." The flood tide line, he pointed out, is now 50 to 100 feet farther up the beach than before the storm. "If no more storms hit us hard this winter," we could open with one beach next summer, Riker explained. "But it will be a lot shorter walk from the parking lot to the water than it used to be." Riker believed the state park could be saved, but the cost would be high--in the neighborhood of $1.5 million. "We need four jetties, and we need them now, and we need a lot of sand pumped in to replace what we've

lost." But, in view of the legislation pending before the 91st Congress to establish Sandy Hook National Seashore, many politicians questioned whether the state would appropriate such a sum for land slated to become a federal responsibility.[37]

37. Newark Star-Ledger, November 17, 1968.

VI. FORT HANCOCK'S LAST YEARS AS A MILITARY POST: 1970-74

A. ARADCOM's Shrinking Role in the Nation's Defenses

1. The March 1971 Reorganization

During the years between 1970 and 1974, when ARADCOM was phased out, the economy axe and technological advances resulted in major organizational changes and reductions in personnel. The first of these was revealed in the late winter of 1971 and was to be implemented by June 30.

On March 3, Lieutenant General George V. Underwood, Jr., ARADCOM's Commanding General, announced a Pentagon decision for a drastic cutback in his command. The Department of the Army had determined to inactivate 24 NIKE-HERCULES batteries, seven battalion headquarters, two group headquarters, and Second Region headquarters, in 15 states. Thirteen firing batteries and six battalion headquarters, as well as the two group and regional headquarters, were Regular Army units, while 11 firing batteries and one battalion headquarters were National Guard units. These inactivations would eliminate the protection afforded the Minneapolis-St. Paul, Milwaukee, and Cleveland areas by NIKE-HERCULES batteries.

Among the units to be inactivated were these batteries assigned to the 52d Brigade:

Connecticut
Ansonia (ARNG)--Battery D, 1st Battalion, 192d Artillery
East Windsor (ARNG)--Battery B, 1st Ballation, 192d Artillery
Hartford (ARNG)--Headquarters, 1st Battalion, 192d Artillery
Massachusetts
Rehoboth--Headquarters, 3d Battalion, 5th Artillery
New Jersey
Clementon--One-half Battery A, 3d Battalion, 43d Artillery
Franklin Lakes (ARNG)--Battery D, 7th Battalion, 112th Artillery
South Plainfield (ARNG)--Battery C, 7th Battalion, 112th Artillery
Rhode Island
North Smithfield (ARNG)--Battery B, 2d Battalion, 243d Artillery

Units slated to be deactivated mustered about 3,100 Regular Army personnel. These people were to be transferred to other ARADCOM units or to other branches of the Army. Every effort would be made to find positions for the approximately 1,100 National Guard technicians and 38 Department of the Army civilian employees affected by the site closures.

Selection of the units to be inactivated had been guided by these factors:

a. Strategic significance of the area defended.
b. Retention of the maximum number of defenses.
c. Providing the best possible all-around coverage within a particular defense.
d. Retention of those batteries which contribute most to the tactical effectiveness of a particular defense based on the current threat to the nation's security.
e. Maintenance of sufficient Regular Army batteries to provide a necessary rotation base to the Nation's Air Defense Artillery units overseas and to preserve a source of personnel to man Safeguard AMB units.[1]

General Underwood, in a message to his missilemen, pointed out that the decision to inactivate these units reflected a necessity by the Pentagon to reduce the cost of the defense program. As the Army reduced its commitments, in conjunction with Vietnamization of the conflict in Southeast Asia, "the remainder of the Army must be reshaped in an effort to get the best balance between available resources and continuing mission requirements. Thus what is happening to ARADCOM is a part of an Army-wide readjustment."

1. ARADCOM Argus, March 1971.

As a result of these inactivations, the NIKE-HERCULES units assigned to ARADCOM would be reduced some 61 percent from the peak deployment of 134 batteries in 1963. The remaining 52 NIKE-HERCULES and 16 Hawk firing units would be retained until a more sophisticated system such as SAM was ready for deployment.[2]

Implementation of the reduction led to a reorganization of ARADCOM into two regions, the First and Sixth, and a separate brigade. The latter would include the two Florida defenses--Homestead-Miami and Key West--and report directly to ARADCOM's headquarters.

The area of responsibility for the 1st Region would be expanded to include the present territory of the 2d Region following that unit's inactivation. Within the expanded 1st Region, several changes were to be made. Upon inactivation of Headquarters, 2d Region, 28th Artillery Group (AD), Detroit Defense, was to be assigned to 45th Artillery Brigade (AD) of the Chicago Defense and come under jurisdiction of 1st Region. The 18th Artillery Group (AD) of the Pittsburgh Defense was to be assigned to the 35th Artillery Brigade (AD) at Fort George G. Meade.[3]

2. The 1973 Reorganization

In mid-January 1973, a further reorganization and reduction in ARADCOM was announced by the Department of Defense. Three ARADCOM brigades were to be reorganized and redesignated as groups and three headquarters batteries were to be phased out. Additionally, command of the Detroit Defense would be shifted from Detroit to the Chicago Defense. Coincidentally, there would be changes in the New York-Philadelphia, Washington-Baltimore-Norfolk, and Los Angeles defenses. There would also be a realignment of Safeguard activities for the command. These reorganizations and realignments were

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2. Ibid.

3. Ibid., April-May 1971.

to coincide with a major reorganization of Army commands in the United States, which included elimination of CONARC and constitution of two new commands. Thirty-eight missilemen in each of the closing headquarters/batteries would be transferred to other assignments in ARADCOM to fill vacant billets.

The two actions--reorganization and realignment--it was estimated would save the taxpayers about $4,500,000 annually and eliminate about 270 jobs. This would break down to about $2,500,000 in ARADCOM and $2,000,000 in Safeguard activities, with about 250 jobs affected in ARADCOM and 250 positions in Safeguard. The Safeguard jobs were to be dropped over a three-year period.

The Safeguard realignment resulted from the Strategic Arms Limitation Agreement (SALT) between the United States and the Soviet Union. After 1972 congressional action further restricted Safeguard deployment to one site, the one then being completed near Grand Forks, North Dakota, over which ARADCOM was scheduled to take operational command in late 1974.[4]

The ARADCOM brigades to be reorganized as groups were:

52d Air Defense Artillery Brigade, Highlands, New Jersey, for the (New York-Philadelphia Defense)

35th Air Defense Artillery Brigade, Fort Meade, Maryland, for the (Washington-Baltimore-Norfolk Defense)

45th Air Defense Artillery Brigade, Fort Sheridan, Illinois, for the (Chicago-Detroit Defense)

The headquarters batteries to be closed and the estimated savings were:

Headquarters Battery, 1st Missile Battalion, 51st Air Defense Artillery, at the Highlands, of the New York-Philadelphia

4. Ibid., February 1973.

Defense, which would eliminate 50 military slots and save about $400,000 annually. Cost of the closing would be approximately $90,000. The firing batteries of the 1st Missile Battalion, 51st Air Defense Artillery, would become part of the 3d Missile Battalion, 43d Air Defense Artillery, headquartered at Pedricktown, New Jersey, and that battalion would take over the functions of the deactivated headquarters battery.

Headquarters Battery, 2d Missile Battalion, 65th Air Defense Brigade, Los Angeles Defense, at Van Nuys, California, which was expected to do away with about 40 military positions and save $700,000 a year. Cost of closing this site would be about $350,000.

28th Group, Detroit Defense, Selfridge Field Air Force Base, Michigan, would close and eliminate 115 military slots at a savings of more than $900,000 annually, and cost about $190,000 to implement.

Functions of these two headquarters batteries would be taken over by group headquarters--the 19th Air Defense Artillery Group in the Los Angeles Defense, and the 45th Air Defense Artillery Group in the Chicago-Detroit Defense.[5]

3. The Activation of the 16th Air Defense Artillery Group

On June 4, 1973, to implement the reorganization and cut backs, Headquarters, 52d Air Defense Artillery Brigade, was inactivated at the Highlands Army Air Defense Site and Headquarters and Headquarters Battery, 16th Air Defense Artillery Group were activated. Coincidentaliy, Battery C, 3d Missile Battalion, 51st Artillery (AD), was inactivated at Fort Hancock and Battery C, 3d Missile Battalion, 43d Artillery (AD), activated at the same post.[6]

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5. Ibid.

6. Unit Jacket, 16th Air Defense Artillery Group, Files, CMH.

Units constituting the 16th Air Defense Artillery Group were posted:

16th ADA Group Hqrs.
Highlands AADS, N. J.

"HHB" 3/43 ADA Pedricktown, N. J.
A/3/43 ADA Clementon, N. J.
B/3/43 ADA Swedesboro, N. J.
C/3/43 ADA Fort Hancock
D/3/43 ADA Fort Tilden

"HHB" 1/244 ADA, N. Y. NG Huntington Sta., N. Y.
A/1/244 ADA, N. Y. NG Farmingdale, N, Y.
B/1/244 ADA, N. Y. NG Rocky Point, N. Y.
C/1/244 ADA, N. Y. NG Orangeburg, N. Y.

"HHB" 1/244 ADA, N. J. NG Livingston, N, J.
A/1/254 ADA, N. J. NG Livingston, N. J.
B/1/254 ADA, N. J. NG Livingston, N. J. [7]

B. The Brigade and Group Commanders

1. General Desmond as Brigade Commander: July 1970-January 1972

General Desmond, commander of the 52d Brigade from July 31, 1970, until January 1972, was born in Boston in 1922, graduated from the U. S. Military Academy in 1944, and served as a battery commander in the 879th Field Artillery Battalion in France and Germany in the closing months of World War II. After occupation duty and service with the 13th Constabulary Squadron, Lieutenant Desmond returned to the United States and attended Harvard University, obtaining a MA in International Affairs, preparatory to a tour of duty as an instructor in the Department of Social Science at West Point.

After service in the Far East, from 1953-56, with the field artillery, Major Desmond attended Command and General Staff College at Fort Leavenworth. In 1962, he was sent to the British Army Staff College in Camberley, England, followed by an assignment as a staff officer in J-2, Intelligence CINCNELM in London.

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7. Nike-Sage Brush, November 1973.

In 1964, Lieutenant Colonel Desmond attended the Army Air War College. Upon graduation, he commanded the 3d Battalion, 517th Artillery Air Defense, Selfridge Field, Michigan. Prior to his assignment to the 52d Brigade, Desmond had commanded in succession the 88th Artillery Group Air Defense and the 13th Artillery Group Air Defense.[8]

2. Colonel Farrell as Brigade Commander: January 1972-June 1973

Early in January 1972, Colonel Peter J. Farrell assumed command of the 52d Air Defense Artillery Brigade, General Desmond having been ordered to Central America as assistant chief of staff for operations, Southern Command, Canal Zone, Republic of Panama. A native of Albany, New York, Farrell had been commissioned a 2d lieutenant of field artillery upon his June 1950 graduation from West Point. His first assignment was as a forward observer with the 36th Field Artillery Battalion at Fort Lewis, Washington. From January 1951 to January 1953, Farrell was with armored field artillery batteries in Alaska.

After schooling at Fort Bliss, he was assigned to the 22d Antiaircraft Automatic Weapons Battalion, where, as a captain, he led a battery until 1955. From July 1957 to June 1959, Farrell was assistant professor of military science and tactics at the Universities of Michigan and Eastern Michigan. While at these institutions, he earned a master of arts degree in education from Eastern Michigan and master of science degrees in aeronautical engineering and instrumental engineering from the University of Michigan.

From 1961 to 1964, he was assigned to the G3 Section, Headquarters, ARADCOM, in Colorado Springs. He then served at Sandia Base, New Mexico, until 1966 when he left for Vietnam to take command of the 6th Battalion, 56th Artillery. Before assuming command of the 52d

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8. John B. Desmond's Biography, U. S. Army, Office, Chief of Information; ARADCOM Argus, September 1970; telephone interview, John B. Desmond with Edwin C. Bearss, August 21, 1981.

Brigade, Colonel Farrell had been assigned to the Office of the Secretary of Defense as staff officer, Nike-X and Space Division, and subsequently as the Army member, Weapons System Evaluation Group.[9]

3. Colonel Hugo Takes Command of the 16th Air Defense Artillery Group

Colonel Victor J. Hugo, Jr., assumed command of the newly activated 16th Air Defense Artillery Group on July 5, 1973. Born on May 28, 1931, in Beverly, Massachusetts, Hugo graduated from the U. S. Military Academy in June 1954. He served in Vietnam as commander of the 1st Battalion, 44th Artillery, XXIV Corps, and while in combat had been wounded and had earned several decorations, including the bronze star, air medal, and purple heart. Immediately prior to his assignment to the 16th Group, Hugo had served in the Pentagon as Assistant Secretary of the General Staff (Coordination and Reports) Office, Secretary of the General Staff Office, Chief of Staff of the Army. He had been promoted from lieutenant colonel to colonel on June 14, 1973.[10]

C. The Regional Army Air Defense Command Post (AADCP)

1. Its Mission and Staff

A major component and the nerve center of the 52d Artillery Brigade was the Army Air Defense Command Post (AADCP). Personnel assigned to AADCP manned the computer-controlled system which coordinated the firing units in their detection, tracking, and launching of the NIKE-HERCULES against hostile targets. The expanded computerized equipment insured adequate and distributed protection throughout the entire defense system and enabled the defense commander to react immediately to any tactical situation.

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9. ARADCOM Argus, February 1972; telephone interview, Peter B. Farrell with Edwin C. Bearss, August 21, 1981.

10. Victor J. Hugo, Jr., Resume of Service Career, Public Information Division, Department of the Army; telephone interview, Victor J. Hugo with Edwin C. Bearss, August 21, 1981.

Day-to-day 24-hour operation of AADCP was the responsibility of a tactical director. He made the decisions, supervised the personnel, and coordinated the fire units with AADCP. A senior master-sergeant and his assistant were responsible for coordinating the administrative activities of the radar, maintenance and supply, etc. Under them were three crew chiefs, who supervised tactical operations. Each crew chief led from 10 to 15 men in manning the positions of tactical director assistants, senior tracker, tracker, assistant senior tracker, journal clerk, coordinator correlator, VHF tellers, and plotters for the five plotting boards. Together they constituted teams that provided around-the-clock protection for the northeastern population and industrial centers against air attack.[11]

2. The 1970 Special Air Defense Exercise

In the late spring of 1970, personnel of the 52d Artillery Brigade (AD) and its two defenses, New York-Philadelphia and New England, confronted a special air defense exercise designed to jointly test their defense capabilities, as if they were in a "strategic environment." As programmed, the engagement supported simultaneous training at the command post and fire unit levels in counteracting varying hostile aircraft manuevers and different command decision situations. As if in combat, personnel monitored the sky to identify and separate friendly aircraft from simulated supersonic enemy bombers, making a variety of evasive maneuvers to escape interception. The exercise also tested the ability of ARADCOM units to defeat complex radar jamming typical of the electronic subterfuge enemy air crews might employ in an attack. This total environment was established through AN/GPS-T2 and AN/MCQ-TI, target simulators assigned to AADCPs and fire units.

The plan for the exercise was developed at the Highlands AAD at a joint defense conference. Representing the military were Major Thomas Shea, command post director; 1st Lieutenant Richard Barry,

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11. Nike-Sage Brush, March 1969.

senior tactical director, New York-Philadelphia Defense; and 1st Lieutenant Dennis Lavalle, senior tactical director, New England Defense. Civilians in attendance were: Melvin Messer, Desmond Wassel, and W. B. Ford, all representing the System Development Corp., Santa Monica, California. Control, conduct, and critique of the exercise was undertaken by the 52d Brigade's Trusted Agent Force.[12]

D. Battery C, 3d Missile Battalion, 51st Artillery (AD), Fires Perfect Score

Battery C, 3d Missile Battalion, 51st Air Defense Artillery, spent the week of August 2-8, 1971, at McGregor Missile Range, where it became the first Regular Army NIKE-HERCULES unit to fire a perfect score since 1961. Moreover, the unit became only the tenth HERCULES battery to achieve a perfect score in the annual service practice (ASP) in a decade, the other perfect scores being recorded by National Guard units assigned to ARADCOM.

When the officers and men of the battery deplaned at Newark, after their successful ASP, they were greeted by General Desmond, the 52d Brigade's commanding officer, and Colonel William H. Eichorn, deputy brigade commander. "This achievement is particularly impressive in view of the high turn over rate and severe personnel shortages during the past year," General Desmond told Major William F. Cowan, battery commander, and members of the unit. "This score is the result of intelligent planning, skillful execution, and attention to detail at every level. It is a direct reflection of the dedication and professionalism and typifies the units of the 52d Brigade," General Desmond added.[13] This feat enabled the battery to share honors in the ARADCOM Commander's Trophy with two other NIKE-HERCULES and one Hawk unit.[14]

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12. ARADCOM Argus, April 1970.

13. Ibid., August 1972.

14. Ibid.

The ASP system had been established to determine the proficiency and control effectiveness of each firing battery in ARADCOM. It was designed to test the system to see if it could accomplish what it was designed to do, if the nation were attacked. In addition, ASP helped the commanding general of ARADCOM to determine other facts about the command:

a. Deficiencies, problem areas, and adverse trends which could degrade tactical effectiveness.
b. Methods for perfecting personnel skills and procedures in the adjustment and maintenance of the NIKE missile system.
c. System component improvements that would result in increased reliability and accuracy.

On their annual trip to McGregor, each battery had to assemble a missile, prepare the system for firing, and then launch the missile. NIKE-HERCULES batteries fired one missile and Hawk batteries fired two. Batteries could score a maximum 2,200 points. Those scoring between 1,540 and 2,200 points were rated satisfactory. Those scoring fewer than 1,540 points were rated unsatisfactory and were required to undergo ASP again after further training.[15]

E. Special Events Scheduled and Held by the Military

1. Commemorating Fort Hancock's 75th Anniversary

To commemorate Fort Hancock's 75th anniversary, an open house was scheduled. Fatigue details of military personnel, reinforced by Boy Scouts of Fort Hancock, Troop 19, and supervised by Post Commander Lieutenant Colonel John A. Pierce, cleaned out from the interior of Battery Potter an accumulation of trash and debris resulting from years of neglect and vandalism. The scouts and soldiers also grubbed up the undergrowth covering the exterior and interior slopes of the structure. The row of concrete and frame fire control stations on the

15. Ibid.

battery terreplein still bore bearings delineating the direction to check points on Manhattan, Long, and Staten islands, easily visible through the observation slots. Battery Potter, Colonel Pierce promised, "will be spick and span and open to the public Oct. 31."

At Sandy Hook Museum, established in the former post guardhouse (Building 28) on May 24, 1968, Curator George H. Moss and his assistant, Harvey Haddon, were hard at work. Haddon (artist, craftsman, and former Fort Hancock sign painter) had employed maps, plans, and photographs to prepare a three-dimensional scale model of the reservation and Sandy Hook as they appeared in 1909. He had thoughtfully included the liner Aquitania, as she passed the Hook on her way into New York Harbor.[16]

The Sandy Hook Museum had the mission of preserving and interpreting the significant history of the peninsula from its discovery by Henry Hudson in September 1609 until today. Curator Moss, in cooperation with the Army and through the generosity of the Friends of Sandy Hook, Inc., compiled a handsome, profusely illustrated booklet titled, 75th Anniversary of Fort Hancock, Sandy Hook, New Jersey. This was made available to people attending the open house.

The open house was held between 10 o'clock and 4 p.m. on October 31, 1970. There were guided bus tours of the reservation with stops at Battery Potter; the Sandy Hook Museum; the southwest bastion and northwest curtain of the granite fort; Officers' Row; the Brick House; the Sandy Hook Marine Laboratory; and the Hally-Burton Memorial.[17]

2. The November 29, 1972, Fort Hancock Open House

On November 29, 1972, the commander of the 1st Battalion, 51st Air Defense Artillery, held an open house at Fort Hancock and the

16. Long Branch Daily Register, October 28, 1970.

17. Asbury Park Evening Press, October 30, 1970.

Highlands for a select group of officials from Monmouth County cities and towns. Upon arrival, the local officials learned that the Army maintained a 24-hour coastal watch on air traffic. At the fort there was ready for immediate use a battery of NIKE-HERCULES missiles possessing a range of 76 nautical miles. . The 400 men stationed at the two sites were constantly monitored to check their readiness, and they were equipped with radar designed to track any aircraft which approached to within 200 miles of the coastline. Every plane, battalion commander Frank M. Gray, Jr. explained, approaching from overseas is required to file a flight plan. If for some reason they are off course as they approach, they are picked up by the command's radar, and the Air Force scrambles planes into the air space for visual identification. The Air Force, Colonel Gray added, also supplies aircraft for tracking during practice alerts. These manuevers took place during the day's early hours, when commercial traffic was light. The fire stations, Colonel Gray told the visitors, were designed to detect unidentified objects, track them, and with the NIKE missile to destroy them. The battery, Gray noted, was the only one in the Army defense system with dual radar units.[18]

F. Army Reserve Units Use the Post

1. Army Reserves and the Hair Cut Revolt

In May 1971, there was difficulty at Fort Hancock, when an Army Reserve unit, the 298th Army Security Company, was turned out for inspection by Captain Hermann Redd. The captain, distressed to see that about 90 of the men did not have regulation hair cuts, told them that unless this habit changed, they would be ordered to report for active duty. "Long hair . . . extended side burns . . . drooping mustaches . . . and short-hair wigs worn over long hair" were all forbidden by regulations, he fumed. The reservists, whose appearance was deemed to be unsatisfactory, were ordered by Captain Redd to return to their homes. Such an order carried with it an automatic unsatisfactory for the

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18. Asbury Park Press, November 29, 1972; Long Branch Daily Register, November 29, 1972.

day's drill, and five "U's," as they were called, could lead to an automatic call to active duty.

Response by several of the reservists was swift and predictable. A 26-year-old Oakhurst attorney, who had served in the unit for three years, announced that he was filing a complaint under the Military Code of Justice. A sergeant, who drove to the reserve meetings from Connecticut, "had to be physically restrained." Many of the rank and file who had not been called down by Captain Redd, termed the action unfair.

Confronted by what a generation before would have considered a mutiny, Captain Redd rescinded his order. But, in the ensuing "rap session," he warned that there would be no next time.[19]

When questioned by the press, Captain Redd stated that a number of men in the 298th did not measure up, and, he explained, that the unit had been "warned more than any other group" and "next time they will go home." The Army, he continued, would not have any problems, if the troops followed the regulations. Moreover, he could not be a "nice guy" and forget about discipline. Regulations pertaining to hair lengths, Redd pointed out, were posted on the company bulletin board, along with accepted styles, and the reservists were subject to the same regulations as those practiced in the Regular Army. The idea was not how to "make people miserable, but how to get the job done."[20]

The malcontents, while describing Captain Redd as a "superb officer," attacked the system and an archaic regulation. Redd, they told the press, "was caught in the middle, between his men and superiors because of an earlier complaint from his unit about haircuts."[21]

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19. Red Bank Daily Register, May 10, 1971.

20. Ibid.

21. Ibid.

Victor Yepallo, a 24-year-old reservist from Long Branch, when questioned by the media, remarked, "My hair was much longer--I wore a short hair wig, but Capt. Redd has been getting pressure. . . ." Yepallo, a student at Brookdale Community College, had had his hair cut three times in one week in a futile effort to conform to regulations. But, he complained, the military was not satisfied, and insisted on a cut with tapered sides, which he found degrading. On Saturday nights, he felt out of place. What will happen at the June meeting, the correspondent inquired? "I don't know," Yepallo answered. "A guy in our unit was activated last year. Now he's going to Vietnam . . . as a punishment."[22]

Oakhurst attorney Aaron interrupted, my barber considers my hair "the shortest he had seen in the past six weeks," but he, too, had failed the inspection. Pointing out that there were many professional people in the 298th, Aaron remarked, "no one goes into the reserves for a career." It was a way to beat the draft and keep out of the Vietnam fighting, he admitted.[23]

Responding to the complaints, New Jersey Senator Harrison Williams announced that he was investigating the Army's haircut regulations. The Department of the Army, seeing that it had stirred up a storm, modified its stance. On May 28, new regulations were issued calling attention to "current grooming norms within society and the trend of youth toward the wearing of longer hair styles."[24]

Consequently, when the 300 reservists of the 298th Army Security Company assembled for their June meeting, the 90 men whose haircuts had failed the May inspection were found by Captain Redd to be in accordance with the regulation as redefined. When questioned by the

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22. Ibid.

23. Ibid.

24. Red Bank Daily Register, June 15, 1971.

press, Captain Redd stated that he was pleased by the situation, as it was the best thing that could have happened. He would experience no difficulty with the new wording. Everybody, he added, had been up "in arms over the haircuts--not just here, but in all the units. These regulations are quite lenient. You cannot be a hippie, but you can be in step with the times."[25]

2. The Blood Bank and the 78th Infantry Division

Early in November 1971, 40 men of Headquarters Detachment and the 1st Battalion, 1st Brigade, 78th Division, reported to Fort Hancock to each donate a pint of blood to the Monmouth County Blood Bank.[26]

G. Finding and Disarming Two 20-Inch Rodman Projectiles

A late February 1971 storm washed ashore a large, badly eroded Civil War-period cannon projectile. The shell was found on the beach fronting the former proving ground. Erosion had reduced the weight of the shell to about 350 pounds and its diameter to 16 inches. Local historians speculated that the shell was probably the eroded remains of one cast for the giant 20-inch Rodman guns. Munition experts from the Fort Monmouth Explosive Ordnance Detachment (EOD) were summoned, and the shell was taken to Fort Monmouth to be studied and rendered harmless, if armed with black powder.

A second shell washed ashore in April. This projectile, at the request of Post Adjutant William Powers, was rendered inert by the Fort Monmouth EOD team and placed on exhibit in the Sandy Hook Museum. Discussing the projectile with the press, Captain Powers assured them that "it is now harmless, and except for a slight crack, almost intact." It would be cleaned, polished, and lacquered, and a stand built for its display. "And maybe--just maybe," Captain Powers

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25. Ibid.

26. Asbury Park Evening Press, November 10, 1971.

mused, "we can talk the Ft. Monmouth fellas into giving back the first one, because this is the kind of stuff that doesn't turn up every day."[27]

H. Fort Hancock Arts and Craft Center

The ARADCOM Argus for January 1974 featured an article on the Fort Hancock arts and craft center. Ceramics occupied the attention of a number of soldiers and their families. Illustrations accompanying the story were captioned:

> Staff Sergeant William Anderson, Hq. Brty., 16th ADA GP., and his wife work as a team in the ceramics section. . . . At left, Mrs. Anderson mixes a combination of clay and water to form the "slip" from which the ceramic piece is made. Center, . . . [Anderson] pours the "slip" into the readied mold. At right, Anderson holds the final product after it has been painted and glazed.
>
> At left, Mrs. Daniel McCann, wife of Specialist S5 Daniel McCann, Hq. Btry., 16th Gp., displays two of her ceramic projects, a beer stein and a Halloween pumpkin ready for painting and glazing. Center, Mrs. Robert Szymczak, wife of Major Robert W. Szymczak, commander of Brty. C-2, 3d Missile Bn., 43d ADA, discusses one of her ceramic projects with Harry Levin, ceramic instructor. At right, Private First Class Richard Knippel, Hq. Btry., 16th GP., holds one of his finished ceramic products, a Bavarian-style beer stein.[28]

Other soldiers featured in the article were Warrant Officer Joseph E. Williams and Chief Warrant Officer Frank F. Marion, both of Headquarters, 16th Air Defense Atillery Group. The former made colorful

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27. Ibid.

28. ARADCOM Argus, January 1974.

wall panels to decorate his bachelor quarters and the homes and quarters of many of his friends, and the latter colorful rugs of wool remnants.[29]

I. Sandy Hook as a Testing Facility

1. For Electronics Support Command

Personnel from the Army's Fort Monmouth Electronics Support Command for more than a score of years after World War II maintained and operated testing facilities at Fort Hancock. In the winter of 1965-66, personnel from the facility manned an electromagnetic search, intercept, and analysis (Electronics Warfare and Evaluation) system in the area between Battery Peck and the beach. This area was fenced. Within the enclosure was a single-story, gable-roofed structure housing a number of classified instruments, while positioned at strategic sites about the enclosure were various types of electronic sensing gear.[30]

In February 1966, Electronics Support Command announced that it was giving up Buildings 65 (the ordnance storehouse), S149 (a barracks), and 180 (Battery Peck). On March 1, Buildings 65 and S149 were vacated and turned over to the post commander. Electronics Support Command, however, determined to continue using structure 180, along with the 100-foot high signal tower.[31]

By 1974, all Electronics Support Command activities at Fort Hancock, except those housed in structures 180 (Battery Peck) and 539 (Battery Morris) had been phased out. The former continued to shelter the Electronics Warfare and Evaluation Facility and the latter a neutron generator.

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29. Ibid.

30. Personal interview, Henry Jacoby with Hoffman, Harmon, and Bearss, June 4, 1980; photographs AMSEL-RD-66-702 and AMSEL-RD-66-703, U. S. Army Electronics Command, April 25, 1966, Files, Sandy Hook Unit, Gateway National Recreation Area.

31. Walden to Deputy Post Commander, February 23, 1966; Pierce to Newkirk, May 26, 1966; Files, Post Engineer, Fort Dix, New Jersey.

The Electronics Warfare Facility was involved in testing equipment being developed by the Electronics Warfare Laboratory. The importance of this facility rested "on the fact that a large number of both friendly- and enemy-type radars come and go in . . . New York Harbor." The site was large enough to accommodate entire vehicles and electronic shelters, thus allowing complete systems to be tested for effects on bearing, accuracies, etc. Loss of the site, it was pointed out, would delay development of equipment and evaluation of newly-developed equipment, "imposing a severe limitation on the Army's ability to meet its mission requirements."

Building 539 had, since 1966, housed a Cockcraft-Walton accelerator, generating a beam of 14-million electron volt neutrons, as a part of ECOM's Nuclear Radiation Facility. The accelerator was being used by Radio Research and Development Group, Combat Surveillance and Target Acquisition Laboratory, to test and evaluate various tactical field-type nuclear radiation measuring equipment, and the Electronic Materials and Nuclear Hardening Group, Electronics Technology and Devices Laboratory, to improve the radiation resistance of electronic equipment.[32] Because it would cost in excess of $250,000 to relocate these activities and involve a shutdown of about six months, the Army secured from the National Park Service a permit to continue to use and occupy the two structures for five years from January 1, 1975.[33]

2. For International Telephone and Telegraph, Dumont Laboratories, and Columbia University

In the 1960s, a number of research projects were conducted on the Hook for the military. International Telephone and Telegraph and Dumont Laboratories had contracts with Electronics Support

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32. Millian to Commander, Army Materials Command, October 24, 1974, Files, Post Engineer, Fort Dix, New Jersey.

33. Coleman to Lustig, January 27, 1975, Files, Post Engineer, Fort Dix, New Jersey.

Command, while Columbia University's Department of Geology undertook beach form studies for the U. S. Navy.[34]

J. Army Turns Fort Hancock Over to National Park Service

1. Pentagon Denies Reports that Fort Hancock is to Close

Some fourteen months after the inauguration of Richard M. Nixon as 37th President, many residents of Monmouth County were distressed by rumors that Forts Hancock and Monmouth were among the nation's military installations that Secretary of Defense Melvin Laird proposed to close. The Fort Hancock story had originated in a report made by a First Army study team recommending closure of the Sandy Hook facility. When United States Senator Clifford P. Case and Third District Representative James G. Howard made inquiries of the Pentagon, they were assured that there was "no substance to such a report and if anything of this magnitude was to be included in Secretary Laird's recommendations, the Congressmen would have been apprised."[35]

2. President Nixon Makes Important Announcement

The day of reckoning, however, was less that four years in the future. On February 8, 1971, President Nixon announced that he was making available five parcels of surplus federal property for redevelopment as parklands. The largest tract was 1,033 acres at Fort Hancock, including ten miles of beaches and water frontage. Another 603 acres of the Fort Hancock Military Reservation would be retained for federal use. Steps would be taken, the President noted, to secure legislation to simplify transfers of surplus property to local governments and to free additional federal properties for park use.[36]

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34. Newark Star-Ledger, September 8, 1961; "History of Fort Hancock, Sandy Hook, New Jersey," p. 31.

35. Asbury Park Evening Press, March 4, 1970.

36. Ibid.

Meeting to discuss this turn of events, the Monmouth County Planning Board, with Charles M. Pike as chairman, declared that the group was opposed to disposal of any surplus land at Fort Hancock "for any purpose other than recreation." The Board was in agreement that it was "far better for the state or federal government to have a park there instead of the county."

The land described by the President would be deeded to the state free of charge, it was understood, but Governor William T. Cahill and Senator Clifford P. Case were seeking to expedite passage of legislation to include the area in the projected Gateway National Recreation Area. It had been estimated that the cost of restoring the beaches and developing park facilities at Sandy Hook would exceed two million dollars, a sum far greater than local administrations could afford.[37]

3. Army Reviews Its Use of Post Facilities

a. Army Declares 143 Acres Surplus

In line with the President's announcement, the post commander, in the summer of 1971, declared excess to the Department of Defense's needs 143 reservation acres. Located on the subject acreage were nine structures to be retained by the Department of the Army for continued operation of the First Army's Recreation Area. These structures were:

No.	Description	Original Cost	Condition
S164	Guesthouse	$18,000	Fair
S165	Guesthouse	18,000	Fair
S166	Guesthouse	18,400	Fair
S167	Guesthouse	17,500	Fair
S168	Rec Center	5,000	Fair
S169	Mess Hall	5,100	Fair
S170	Theatre	9,400	Fair
S171	BOQ	12,500	Fair
179	Bathhouse (beach club)	52,400	Good

37. Ibid., February 18, 1971.

In addition, the Army would retain the ten recreational trailers on the subject site, along with the right to increase the number of mobile homes in the subject trailer park.[38] In view of the plans to push for inclusion of Sandy Hook in the proposed Gateway National Recreation Area, the Army continued to retain possession of the 143 acres.

b. Building Utilization: May 1972

As of mid-May 1972, Fort Hancock continued to provide facilities for: (a) tactical positions for NIKE site NY 56; (b) family housing; (c) U. S. Army Reserve Center; (d) First Army Recreation Area beach; and (e) the Fort Monmouth Officers' Club beach. In addition, the post's tenants included the U. S. Coast Guard, U. S. Navy, First Army Recreation facility, U. S. Department of Commerce, and the Electronics Support Command (Fort Monmouth). The post population, including dependents and military personnel residing on the reservation, was 1,687. Buildings were assigned as follows:

Type of Activity	Number	Gross Area Square Feet
Administration	13	67,021
Storage	40	110,982
Family Housing	43	222,628
Troop Housing (with mess)	3	73,652
Troop Housing (without mess)	15	82,101
Miscellaneous	116	343,404
Total	230	899,785

Of the 13 buildings assigned to administration, three were on outgrant, three were used by the Army Reserve for administrative and training purposes, and seven were employed for post administration purposes. An inspection of the 40 structures assigned to storage purposes documented that they were being "utilized approximately 60 % of capacity." A similar percentage of these buildings were "outleased or

38. Post Commander to Commanding General, First Army, Files undated, Post Engineer, Fort Dix, New Jersey.

under jurisdiction of the U.S. Army Reserve." There were 43 structures (with 59 units) assigned to family housing. All of these were occupied. Among the buildings categorized as miscellaneous, about 60 percent of their capacity was being employed. Three structures were currently used as bachelor officers' quarters. They were buildings 27, 33, and 171, having a combined capacity of 46 people. At present, there were 21 buildings, comprising 48,701 square feet of space, scheduled for demolition. The 78th Division, U. S. Army Reserve Center, was using nine post buildings, having a gross 65,911 square feet of space, in its program.[39]

On October 27, 1972, President Nixon, less than two weeks before the nation's voters gave him a landslide reelection victory over Senator George McGovern, signed into law legislation authorizing establishment of the Gateway National Recreation Area. Although the legislation called for expenditures of $92,800,000, Park Service officials cautioned that it would be the summer of 1974 before the first Gateway units would be opened under Park Service supervision. These units, they noted, would probably be Sandy Hook, Jacob Riis, and Great Kills Parks, which had been partially developed for recreational purposes by the states involved.

4. Secretary Schlesinger Announces Phase Out of NIKE-HERCULES Sites

On February 4, 1974, Defense Secretary James R. Schlesinger announced plans for virtual elimination of United States-based anti-bomber missile forces and a sharp reduction in the size of the nation's jet interceptor squadrons. As danger from Soviet high level bomber attacks diminished, the Army had accelerated its drive to phase out its NIKE-HERCULES batteries. Also contributing to this program was the withdrawal of United States combat forces from South Vietnam and detente with the Soviet Union.

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39. Lustig to Division Engineer, New York District, May 18, 1972, Files, Post Engineer, Fort Dix, New Jersey.

To be dispensed with in this reorganization would be 48 NIKE-HERCULES batteries--21 manned by Regular Army units and 27 by the National Guard. The phasing out of these installations would leave the Army with only four NIKE-HERCULES batteries and eight Hawk missile units, all in Florida, as training commands.

The programmed reduction in jet interceptor squadrons involved a cutback from 27 squadrons to 20 in the Aerospace Defense Command. This reduction would leave six active duty air guard squadrons of F106 fighters, plus 14 Air National Guard squadrons.

Among the bases to be closed in the New York City metropolitan area would be Forts Hancock and Tilden. When questioned by the press, Colonel Hugo, commanding the 16th Air Defense Group, stated that the deactivation of the Sandy Hook facility would begin May 1 and should be completed by the first of October. The phasing out of Fort Hancock would eliminate 190 civilian positions and 462 military slots at that installation. The Forts Hancock and Tilden reservations would then be incorporated into the Gateway National Recreation Area.[40]

5. Local Effect of News

The decision to close the post came as no surprise to most of the military and civilian personnel. Rumors of the installation's "demise" had been ripe for more than a year, but the formal announcement saddened those who had established their roots in the area.[41] Commenting on the forthcoming deactivation of the bases, the editor of the locally influential Red Bank Daily Register observed that this news was not accompanied by "much of a public outcry." The calmness he attributed to the opinion of his readers that the NIKE-HERCULES missiles, a once sophisticated class of weaponry, had become obsolete in less than 15 years.

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40. New York Times, February 5, 1974, p. 78; Red Bank Daily Register, February 5, 1974.

41. New York Times, February 10, 1974, p. 61.

Although the closings would result in the relocation of Army and National Guard personnel, the Department of Defense was satisfied that most, if not all, of the civilian employees would be absorbed by nearby federal installations or the National Park Service as it enlarged its responsibility at Fort Hancock with development of Gateway National Recreation Area. "Closing of the fort," the editor wrote, "will be of historical interest. Whatever sadness that may bring will . . . be balanced by the knowledge that the public soon will be able to enjoy almost all of Sandy Hook as it takes shape as a park."[42]

6. Steps are Taken to Close Post

During the next several months, plans were made for closing down both Fort Hancock and the Highlands Air Defense Center. Tons of equipment, ranging from the most sophisticated electronics gear for missile tracking and firing to quartermaster and commissary stores, were boxed and transferred to other facilities. Troop strengths were slashed by reassignments. Civil Service employees were transferred or furloughed.[43]

7. The August 15, 1974, Deactivation and Dedication Ceremonies

On August 15, 1974, there was a brief ceremony at Fort Hancock attended by more than 200 civilian spectators and 300 service personnel. The latter, the thin, understrength khaki-clad ranks of three depleted peacetime battalions, were on hand to participate in a final chapter in the history of a post that had once been the key installation guarding the principal approach to America's most important harbor.

The soldiers had assembled to share in and the civilians to watch the formal deactivation of the 3d Battalion, 43d Air Defense Artillery Battalion, a Regular Army unit; the 1st Battalion, 244th ADA, a

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42. Red Bank Daily Register, February 7, 1974.

43. New York Times, June 20, 1974.

New York National Guard unit; the 1st Battalion, 254th ADA, a New Jersey National Guard unit; and Headquarters, 16th Air Defense Artillery Group.[44] The program was a formality because the missiles, the teeth of the defense installation, had already been removed.

Lieutenant General Leonard Shoemaker, commander of the Army Air Defense Command, was present. In his prepared address, the general called the inactivation "an occasion of pride and sadness," adding, "this ceremony gives us one last chance to review the record and be reminded of what air defense bases like this one have meant to the nation." General Shoemaker explained that inactivation of the 16th Group and similar units was dictated by the development and threat posed by Soviet intercontinental and submarine-launched missiles that have replaced the manned bombers which the NIKE-HERCULES-armed units were deployed to combat. "The new national defense strategy," he explained, "focused on retaliation . . . and simple economics and priorities." In these days of escalating costs and tight budgets, he explained, "something had to give, and we were part of that something."

Colonel Neil Allgood, an ARADCOM/National Guard Liaison Officer, characterized the ceremony as "the last of the ceremonies. We've been closing down bases like this all around the country for the past several years," he added. Only the Homestead, Florida, base was to be retained. Colonel Allgood then reminded his listeners that Air Force jet interceptors had already filled and would continue to do so, the security void left by the phasing out of the NIKE-HERCULES units.[45]

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44. Lieutenant Colonel John S. Edge commanded the 3d Battalion, 43d; Lieutenant Colonel Francis J. Horgan the 1st Battalion, 244th; and Lieutenant Colonel Alfred V. Busicchia the 1st Battalion, 246th.

45. Red Bank Daily Register, August 16, 1974; Headquarters, 16th Air Defense Artillery Group, Inactivation Ceremony, August 15, 1974, Files, Sandy Hook Unit, Gateway National Recreation Area.

After the Fort Monmouth band played "Auld Lang Syne" to end the ceremony, General Shoemaker and Gateway National Recreation Area Superintendent Joseph Antosca cut a red ribbon at the entrance to Guardian Park, opening to visitation the one-acre memorial built by the Army and "dedicated to the men and women of the New York-Philadelphia Defense." Four 75mm guns then barked ten times to sound "the death knell" of Fort Hancock.[46]

In the park, overlooking Sandy Hook Bay, at the convergence of Hartshorne Drive and Magruder Road, had been positioned two unarmed missiles--a NIKE-HERCULES and a NIKE-AJAX. Beside them was unlimbered a small 75mm howitzer, commemorating the earlier deployment at the post of conventional artillery for coastal defense. Near the missiles was positioned a marble memorial and bronze plaque, on which were inscribed the names of the six enlisted men and four Ordnance Corps civilian employees killed in the May 22, 1958, explosion of eight NIKE missiles at the nearby Middletown missile site.

Colonel Hugo, former commander of the 16th Group and currently posted in Washington, also participated in the dedication of the memorial park. The thought behind the park, Colonel Hugo explained, "is that it will provide future generations, especially visitors to Gateway Recreation Area, with the opportunity to pause and reflect on the contributions of the 16th Air Defense Artillery and its predecessors have made to this area and to the defense of the United States." In closing, he noted, "The spirit and willingness to give--that's the message that we hope Guardian Park will acknowledge."[47]

Following the ceremony, Area Manager Dale B. Engquist of the Sandy Hook Unit, Gateway National Recreation Area, informed the

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46. Fort Hancock Clipping File, August 16-17, 1974, Files, Sandy Hook Unit, Gateway National Recreation Area.

47. Ibid.; Asbury Park Press, August 20, 1974. Colonel Hugo had been relieved as commander of the 16th Group on June 12, 1974.

press that about 1,300 acres of Defense Department land would soon be formally turned over to the Department of the Interior. Included would be the post area, plus the remainder of the peninsula's undeveloped land, exclusive of the point of the Hook, which has to fall heir to the Coast Guard. Engquist emphasized that the core-area of Fort Hancock--the parade ground and adjacent buildings--would be refurbished and incorporated into the national recreation area. Preservation was to have a key role in the area's development by the National Park Service.[48]

8. Combating Vandalism

Some civilians confused the deactivation of the 16th Air Defense Group and the three missile battalions with the closing of Fort Hancock. This led to trouble and a number of unauthorized incursions onto the reservation in early September.

Deputy Post Commander Herbert W. Hayes therefore warned that Fort Hancock was still under Army control and trespassers were subject to arrest and prosecution in the federal courts. Already apprehended was a man who had obtained a car pass from its original holder and, entering the base, had sought to steal the bronze door pins from the doors of one of the Endicott fortifications by employing a sledge hammer.

The Federal Bureau of Investigation had arrested a man driving a camper, who had exhibited a merchant marine identification card and had attempted to use it to gain access to the post exchange to take advantage of the reduced prices charged service personnel.

Colonel Hayes, himself, had confronted a 61-year-old man from Brooklyn, who had driven onto the post in the family car, and was loading it with tomatoes from the troops' garden plots. "You're stealing!" the colonel exclaimed. "Oh, no, colonel, it's all right to take these

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48. Ibid.

tomatoes, eveyone's doing it," the man replied. As Colonel Hayes recalled, he had "never been so cold and hardhearted. If it had been a youngster, it might have been different, but a 61-year-old-man." The intruder was issued a summons to appear in federal court.[49]

9. Colonel Hayes Tells of Plans to Close Installation

When he told the press of these problems, Colonel Hayes remarked that, although Fort Hancock would be deactivated by December 31 and its principal tenants had already left, it would then become the responsibility of the Department of the Interior. Under no circumstances would it be abandoned to looters and vandals.

A rear echelon from the Air Defense Command would be on post until October 31, cleaning out and securing the area. Post personnel, including military police, engineers, and some civilian employees of the Army, would stay until Fort Hancock was deactivated. Two naval inshore underwater units were scheduled to stay on the reservation for at least five years. Also slated to remain at Sandy Hook, when it was transferred to the National Park Service as a unit in the Gateway National Recreation Area, was the Army Reserve Center, which would accommodate about 1,000 weekend warriors; some 100 coast guardsmen assigned to the Sandy Hook station; and two Department of Commerce installations--the National Marine Fisheries Service and Sandy Hook Marine Laboratory. The Corps of Engineers planned to retain about 40 acres at the point of the Hook to facilitate dredging to maintain the adjacent Sandy Hook shipping channel.[50]

10. Last Army Activity Closes

The last post Army activity to close on December 31 was the Fort Hancock Fire Company. The chief and captain planned to retire

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49. Red Bank Daily Register, September 6, 1974; Asbury Park Evening Press, September 6, 1974.

50. Red Bank Daily Register, September 6, 1974.

after more than 20 years service, and one of the other nine firefighters was transferring to Earle Naval Ammunition Depot. As yet, the other men were having difficulty finding work as paid full-time firemen. These men were understandably disappointed at the decision to close the fire station, along with Fort Hancock, and to turn the facility over to the National Park Service. Many people, Lieutenant William Montgomery explained, "don't think our company is necessary, because we don't fight a lot of fires, but they don't bother to check into how many hours of preventive inspections we put in that gives us such an excellent record." Hereinafter, Montgomery cautioned, the reservation will have to depend for fire protection on the Highlands and Seabright companies.

It was at least a seven-mile drive from either Highlands or Seabright to the Sandy Hook Coast Guard Station, and to travel this distance took 15 minutes. Moreover, during storms, the access road across the neck flooded, and in case of an emergency heavy fire equipment could not reach the Hook. During 1974, the Fort Hancock company had answered more than 80 calls, most of which were brush fires. Also looking for a home as the end of the year approached was Lady, the station house's three-year-old Dalmatian, and her five puppies. The firemen did not want to send Lady to a private home, because she enjoyed life at the station. Whenever there was an alarm, she was the first one on the truck.[51]

51. Asbury Park Evening Press, December 16, 1974.

VII. IMPROVEMENTS, MAINTENANCE, AND UTILIZATION OF POST STRUCTURES

A. General Statement

Decentralization of administration and a plethora of records has made it impossible to prepare a comprehensive or satisfactory structural history of the Sandy Hook Military Reservation during the post-World War II years. As noted in the foreword, we have been unable to identify or locate the great mass of records relating to post construction and maintenance for the years 1948-74. Until the various Federal Records Centers are able to inventory, catalog, and make these records available to the researcher, the ensuing data must suffice.

B. Transfer of Sites and Structures to U. S. Coast Guard

1. By 1950 Action

In October 1950, four months after deactivation of Fort Hancock, the Department of the Army transferred to the U. S. Coast Guard sites No. 2, the apartment house tract; No. 3, the fog signal tract; No. 4, boat house tract; No. 5, Sandy Hook Lifeboat Station tract; and No. 7, Sandy Hook Point Light tract.[1]

Coincidentally, the Army turned over to the Coast Guard a number of structures valued at $212,049. Buildings involved were:

Structure	No.	Walls	Roof	Cost
One-car garage	T542	Wood	Tar paper	$ 75
Mine storage room	T508	Wood	Wood and tar paper	3,775
NCO quarters	T530	Wood	Asbestos shingles	5,000
NCO quarters	141	Brick	Slate	46,419
NCO quarters	142	Brick	Slate	46,419
Radio repair shop	T531	Wood	Roofing paper	5,346
Mine boat shop	T520	Wood	Asphalt shingles	83,863
Mine storehouse	T508	Concrete	Corrugated	14,400

1. Pace to Secretary of the Treasury, October 25, 1950, Files, Post Engineer, Fort Dix, New Jersey.

Structure	No.	Walls	Roof	Cost
Mine loading room	T511	Wood	Shingle	3,000
Salt water pump house	T513	Concrete	Shingle	3,000[2]
TNT building	T518	Wood	Shingle	750[2]

2. By 1967 Special Use Permits

On December 10, 1967, the Department of Defense issued to the Coast Guard a special use permit for a 4.59-acre trailer park. The permit, which was to run for five years, was not renewed in December 1972, because of complications arising from establishment of the Gateway National Recreation Area.[3] Meanwhile, on March 29, 1967, the Department of the Army had granted the Coast Guard a special use permit for Building S103. This permit likewise ran for five years, but was renewed upon its expiration for another 24 months.[4]

C. Special Use Permits Granted to the U. S. Navy

On December 1, 1956, the Department of the Army granted to the Department of the Navy a permit for use of 1.85 reservation acres, along with structures 102, 119 (T304), 120 (T307), 171 (T295), E501, E503, E509, E510, 541 (mine casemate), base end station 1, station M1, and test area.[5] As of April 30, 1971, the Navy had granted the Coast Guard a special use permit for structures 102, 119 (T304), 120 (T307), and E501. At that time E503 and E509 were vacant and the Army was

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2. Durgin to files, undated; Bayer to Commanding General, First Army, August 4, 1958, Files, Post Engineer, Fort Dix, New Jersey.

3. Report of Compliance Inspection--Outgrants, May 4-5, 1972, Files, Post Engineer, Fort Dix, New Jersey.

4. Ibid.

5. Permit NYDRE (M)-3330, December 1, 1956, Files, Post Engineer, Fort Dix, New Jersey.

using E501. On May 3, 1971, the Naval Reserve was given permission by the Department of the Army to use Building T331 for its program.[6]

D. Special Use Permits Granted to Department of Commerce

On August 1, 1970, the Department of the Army granted a permit to the Department of Commerce for use of Buildings 19, 20, 21, 22, T352, T353, 516, 519, and wharf 536 by the National Marine Fisheries Service. This permit was to expire on July 31, 1975.[7]

E. Maintenance and Repair of Post Buildings

1. Officers' Row (Buildings 1-18)

During the years 1947-74, the post engineer made improvements and repairs to the Officers' Row quarters. Obsolete boilers in all the subject quarters were replaced with "new boilers of proper size." This was accomplished in the late summer and early autumn of 1947.

During the following spring, carpenters repaired the woodwork and flashing and painted 35 dormers on quarters 1-18. At quarters 5 this involved installing new gutters and flashing, painting all new work, removing and replacing ridge roll, and dormer flashings and cornices. Then, in the autumn of 1949, workmen returned and repaired existing defective roofing and sheet metal. The "new work" was then painted.

In fiscal year 1949, workmen removed the defective tin roof from quarters 11, replacing it with a copper roof. They then removed the tin linings from the quarters 11 and 12 gutters and replaced them with 16-ounce copper linings and fastenings.

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6. Baxter to Commanding Officer, Fort Hancock, undated; Adjutant General, Fort Hancock to Commanding General, First Army, May 3, 1971, Files, Post Engineer, Fort Dix, New Jersey.

7. Permit DACA SI-A-70-449, August 1, 1970, Files, Post Engineer, Fort Dix, New Jersey.

Post workmen, in 1965, replaced a wood floor in quarters 18 with one of concrete.[8]

2. Duplex NCO Quarters (Building 21)

In fiscal years 1964 and 1965, improvements were made to Building 21. During February of the former year a hot water heater was replaced, and in April of the latter an exhaust fan was installed.[9]

3. One-Company Barracks (Buildings 22-25)

During the summer of 1948, workmen spent several days rehabilitating barracks 22 and 23. Defective ironwork was replaced, roof flashings recaulked on walls adjoining tin decks, and the decks, railings, and posts repainted. Two rotten wooden posts at barracks 22 were renewed.

In December 1948, workmen turned their attention to barracks 24 and 25. They recaulked the flashings, repaired railings and posts, and repainted posts and railings. Barracks 24 was reroofed with 90-pound asphalt shingles.

In the summer of 1955, barracks 25, having been assigned to the WAC detachment, women's lavatory facilities were installed in the latrines, after the urinals were removed. Laundry facilities for 142 WACs were added.

About the same time, a fire alarm system was installed in barracks 22. In March 1963, one of the barracks rooms was converted into an arms room.[10]

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8. Real Property Record Cards, Buildings 1-18, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

9. Real Property Record Cards, Building 21, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

10. Real Property Record Cards, Buildings 22-25, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

4. Post Headquarters (Building 26)

In the summer of 1965, post engineer workmen replaced the front porch, steps, and door of Building 26 at a cost of $1,775.[11]

5. BOQ (Building 27)

During fiscal year 1965, the first and second floors of the BOQ were rehabilitated. Involved were realigning interior walls, installing new electric outlets, positioning ceramic tile in showers, etc. Cost of this work was $10,475.[12]

6. NCO Club (Building 36)

In the winter of 1941, during the national emergency, Building 36 (quartermaster stables) was converted into a barracks. Soon after the attack on Pearl Harbor, an enclosed (9' 6" by 32') porch was added, and during World War II the building was turned into a noncommissioned officers' club.

During the 1960s, several improvements were made to the club. In 1963, the water closets were partitioned for privacy; in 1965, awnings for the windows at the west end of the first floor were hung and a new hot water heater installed; in 1966, a new awning window was purchased; and in 1968 security screens were positioned on the doors and windows.[13]

7. Service Club and Gym (Building 40)

In fiscal year 1965, measures were taken to make secure six windows and two doors of the service club. Protective screening was

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11. Real Property Record Cards, Building 26, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

12. Real Property Record Cards, Building 27, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

13. Real Property Record Cards, Building 36, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

employed for the former. Coincidentally, a new hot water heater was installed.

Storm windows were purchased and hung during the winter of 1967-68.[14]

8. Sunday School and Nursery (Building S41)

In May 1965, Building S41, having been designated a Sunday school and nursery, a windbreak was positioned on the east elevation.[15]

9. Post Library (Building S46)

In December 1963, windbreaks were added to the north and west doors of the post library.[16]

10. Two-Company Barracks (Building 74)

During fiscal year 1948, the obsolete boilers in both wings of the barracks were replaced. This was accomplished in conjunction with the replacement of the boilers in the Officers' Row quarters.[17]

11. Nurses' Quarters (Building S331)

In fiscal year 1965, the nurses' quarters (female BOQ) were rehabilitated at a cost of $1,000.[18]

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14. Real Property Record Cards, Building 40, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

15. Real Property Record Cards, Building S41, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

16. Real Property Record Cards, Building S46, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

17. Real Property Record Cards, Building 74, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

18. Real Property Records Cards, Building T331, Fort Hancock, "Rehabilitation of Building Nos. 331, 332 & 333," Files, Sandy Hook Unit, Gateway National Recreation Area.

12. Bachelor Sergeants' Quarters (Building T333)

In fiscal year 1965, the bachelor sergeants' quarters were rehabilitated at a cost of $4,000.[19]

13. Duplex NCO Quarters (Structure 338)

In fiscal year 1963, a new radiator was installed on the porch of one of the noncommissioned officers' quarters.[20]

14. NCO Quarters (Building 340)

In fiscal year 1961, a 10' by 13' 4" by 13' 8" by 16' 6" by 9' by 15' 6" addition was made to these frame noncommissioned officers' quarters. The cost of the improvement was $5,417.[21]

15. Lime House Settling Basins (Structure 342)

During fiscal year 1950, workmen repaired the roof of the lime house settling basins and installed strip heaters.[22]

F. Improvements and Maintenance of Grounds

1. Surfacing and Improvements to Open Storage Areas

No.	Date Constructed	Cost	Location	Surface	Area in Sq. Ft.
D-21	1949	$28,000	West of Bldg. 200	Concrete	43,000
D-22	1930	7,200	West of Bldg. 249	Gravel	72,000
D-23	1930	15,000	North of Bldg. 132	Bluestone	81,000
D-24	1951	5,400	South of Bldg. 510	Limestone-screenings	108,000

19. Real Property Records Cards, Building T333, Fort Hancock, "Rehabilitation of Building Nos. 331, 332 & 333," Files, Sandy Hook Unit, Gateway National Recreation Area.

20. Real Property Record Cards, Building 338, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

21. Real Property Records Cards, Building 340, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

22. Real Property Record Cards, Building 342, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

No.	Date Constructed	Cost	Location	Surface	Area in Sq. Ft.
D-25	1951	3,500	East of Bldg. 265	Limestone-screenings	70,000
D-26	1951	5,000	North of Bldg. 510	Limestone-screenings	80,730
D-27	1951	3,500	Motor pool	Limestone-screenings	70,000
D-28	1951	2,500	West of Bldg. 310	Limestone-screenings	40,800
D-29	1951	4,650	Northwest of B-182	Limestone-screenings	93,000
D-30	1951	3,750	South of family trailer park	Limestone-screenings	75,000
D-31	1951	4,650	West of Bldg. 392	Limestone-screenings	93,000
D-32	1955	28,000	Nike launching site	Limestone-screenings	7,325 yds.
D-33	1955	7,200	Nike tracking site	Limestone-screenings	1,055 yds.[23]

2. New Post Electrical Distribution and Exterior Lighting Systems

In fiscal year 1962, a new post electrical distribution system was installed at a cost of $741,800. The new system included 218,060 linear feet of overhead distribution lines, 22,468 linear feet of underground distribution lines, and 45,260 feet of lines to street lights, 31 floodlights, and 191 transformers. Coincidentally, the exterior lighting system was replaced at a cost of $16,700. This involved positioning 175 street lamps and hanging 45,260 linear feet of distribution wiring.[24]

3. Replacement of 48,000 Linear Feet of Sewers

In 1960, more than 48,000 linear feet of sewer mains were replaced at a cost of $135,600. The breakdown of pipe laid was:

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23. Real Property Record Cards, Structures D21 to D33, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

24. Real Property Record Cards, Structures D34 and D38, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

1,111 linear feet of 4" C. I.
2,996 linear feet of 4" V. C.
660 linear feet of 3" V. C.
1,520 linear feet of 6" C. I.
18,258 linear feet of 6" V. C.
12,615 linear feet of 8" V. C.
825 linear feet of 8" A. C.
3,983 linear feet of 8" C. I.
375 linear feet of 10" A. C.
3,940 linear feet of 10" V. C.
2,000 linear feet of 12" V. C.
25 linear feet of 15" V. C.[25]

4. Paving Ditch in Missile Tracking Area

In 1955, a drainage ditch in the Missile Tracking Area was paved at a cost of $200.[26]

5. Septic Tank Construction Program

Septic Tank Drain Fields

No.	Date Constructed	Cost	Location	Capacity
D-43	1948	$ 500	Qtrs. 338	5,000 gpd
D-49	1961	500	Qtrs. 340	3,000 gpd
D-65	1961	800	E. M. beachhouse	1,000 gpd
D-66	1962	3,100	Bldg. 470	2,000 gpd
D-67	4/13/55	3,600	Alert Barracks IFC area	3,000 gpd
D-68	1951	3,000	Alert Barracks IFC area	3,000 gpd
D-69	1961	500	Missile Assembly Bldg. L.C.A. area	1,000 gpd
D-71	1962	3,100	IFC area No. 2	2,000 gpd
D-73	1962	3,100	HIPAR Bldg.	2,000 gpd
D-75	1948	800	Ft. Monmouth's officers' beach	1,000 gpd
D-78	1965	1,000	Kenneis	1,000 gpd[27]

25. Real Property Record Cards, Structure D35, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

26. Real Property Record Cards, Structure D39, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

27. Real Property Record Cards, Structures D43, D49, D65 through D69, D71, D72, D73, D75, and D78, Files, Sandy Hook Unit, Gateway National Recreation Area.

6. Renewing and Extending the Water System

In 1946, the old water system was replaced and new water distribution mains, lines, and fire hydrants positioned at a cost of $226,100. Involved were 119,624 linear feet of mains and lines. Some 25 years later, in 1971, water service was introduced into ten mobile homes of the First Army recreation area at a cost of $1,991.[28]

7. Maintenance and Expansion of Reservation Roads

As of the summer of 1947, the post engineer was responsible for 18 miles of bituminous reservation roads, all of which were 21' in width. During the next 15 years, these improvements were made to the road network:

Date	Remarks	Square Yards	Cost
7/26/47	Single surface treatment	20,892	$2,444.36
7/26/47	Double surface treatment	4,300	1,376.00
7/26/47	Bituminous patching	132	2,508.00
1954	Paving missile launching and tracking areas	17,515	10,609.00
1962	Paving around HIPAR bldg.	485	291.00[29]

There were two miles of concrete roadway on the post of varying widths. In 1954, 259 square yards of roadway were added to the system in the missile tracking area at a cost of $952.[30]

At the end of World War II, there was on the reservation 3.37 miles of gravel roads, with an average width of 14 feet. During the ensuing years, $6,300 was spent on gravel roads to officers' beach and

28. Real Property Record Cards, Structure D44, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

29. Real Property Record Cards, Structure D45, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

30. Real Property Record Cards, Structure D46, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

Batteries Kingman and Mills; $24,802.66 for unspecified access roads; and $4,000 for missile launching site roads.[31]

8. Maintenance and Expansion of Vehicular Parking Areas

During the post-World War II years, surfaced vehicle parking areas were greatly expanded. The records show:

Location	Date	Area (Sq. Yds.)	Type of Surface
Post proper	1940	22,364	Gravel
Barracks area	13/4/55	790	Gravel
Missile launching and tracking sites	1954	7,858	Bituminus
52d Brigade Hdqtrs. Bldg.	1964	362	Bituminus[32]
52d Brigade Hdqtrs. area	1965	2,291	Bituminus

9. Maintenance of Old and Construction of New Walkways

In the post-World War II years, old walkways were rehabilitated and new sidewalks sited and built. These were:

Date	Location/Remarks	Materials	Sq. Yds.	Cost
1954	Missile launching and tracking sites	Bituminus	17	$ 136
1959	Missile launching and tracking sites	Concrete	1,059	10,059
1960	Post proper	Concrete	11,486	15,664
11/30/62	HIPAR non-consolidated	Gravel	82	387
5/64	First Army Rec. area	Concrete	11	110[33]
8/5/64	Ready bldg.	Concrete	135	1,360

10. Positioning of Chain Link Security Fencing

During the decade beginning in 1955, many linear feet of chain link fencing were positioned on the reservation, particularly in security areas. The records show:

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31. Real Property Record Cards, Structure D47, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

32. Real Property Record Cards, Structure D48, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

33. Real Property Record Cards, Structure D50, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

Date	Location	Dimensions	Cost
1955	Barracks alert area, missile launching site	7' x 2,300'	$5,290
1955	Missile tracking area	7' x 3,335'	7,781
1955	Missile launching site exclusion	7' x 1,480'	3,440
10/9/64	Missile launching site ready bldg.	7' x 144'	600
1965	Missile launching site canine kennels	7' x 1,140	2,261
1965	Missile launching site pits	7' x 1,575'	3,720
3/1/65	Rear battalion motor pool	455 LF	1,046
3/1/65	Water plant	1,331 LF	3,061
3/1/65	Battalion motor pool	926 LF	2,129
3/1/65	Sewage pump station	454 LF	1,044
3/1/65	Children's play area	300 LF	690
3/1/65	Sewage treatment plant	642 LF	1,476
3/1/65	Motor pool (transportation)	941 LF	2,164[34]

11. Fire Alarm System

In 1961, a post fire alarm system, complete with 28 boxes, was installed at a cost of $7,200.[35]

12. The 878-foot Well

In fiscal year 1971, a new well, costing $102,745, was drilled to a depth of 878 feet. Its outer casing was 16-inch diameter wrought iron. The well was equipped with two pumps--an electric and a stand-by diesel--and a 275-gallon diesel oil storage tank.[36]

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34. Real Property Record Cards, Structure D53, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

35. Real Property Record Cards, Structure D54, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

36. Real Property Record Cards, Structure D60, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

13. Surfaced Court Area at Service Club and Gym

In 1958, a surfaced multiple court area was constructed adjacent to Building 40, the service club and gym.[37]

G. Construction and Repair of Structures Designed to Protect Sandy Hook Against the Sea

In 1954, the Corps of Engineers expended $40,000 for construction of a stone groin on the bayside, west of Hartshorne Drive, beginning near Pennington Street. Coincidentally, the Corps employed a $135,000 allotment in constructing 350 linear feet of bayside groins to shield the NIKE missile tracking area against continued beach erosion.

Five years later, in 1959, $46,200 was spent on positioning stone groins on the marge of Spermaceti Cove.

In 1961, the United States employed more than $25,000 for 4,200 linear feet of wood bulkheads west of Batteries Kingman and Mills.

During 1965, the engineers made emergency repairs to the wood bulkhead on the bayside extending north from St. Mary's Chapel to the docks. The project was funded from a $32,000 allotment. Coincidentally, they made repairs costing $8,000 to the concrete seawall west of Officers' Row.[38]

H. Construction of Post Buildings not Discussed Elsewhere in Report

1. Waiting Shelters (Buildings S39 and S110)

In fiscal year 1973, two concrete block waiting shelters were erected at a cost of $792 each. The 12' by 7' structures had

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37. Real Property Record Cards, Structure D70, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

38. Real Property Record Cards, Structures D8, D13, D16, D20, and D40, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

concrete floors and wood roofs, the latter covered with asbestos shingles. Building S39 was sited southwest of the BOQ, and S110 was located on Kearney Road, northwest of Building 102.[39]

2. Post Gas Station (Building T143)

The 7' 2" by 7' 2" wood structure was erected in 1957 at a cost of $131. It was demolished by the National Park Service in the winter of 1977-78 and was replaced by a cinder block building.[40]

3. Flammable Materials Storehouse (Building 134)

In fiscal year 1948, a 24' by 8' paint (flammable materials) storehouse was erected. The 24' by 8' galvanized metal structure, sited north of Building 130, cost $550.[41]

4. Fuel Pumphouse (Building 186)

In fiscal year 1950, an 8' 2" by 18' 2" sheet metal fuel pumphouse was erected. The sheet metal structure, sited northwest of the proof battery, was demolished by gale-like winds in June 1976. The materials were then hauled to the dump by NPS maintenance personnel.[42]

5. Concrete Pumphouse (Structure 355)

In fiscal year 1959, a concrete pumphouse was erected at well No. 5 at a cost of $9,000.[43]

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39. Real Property Record Cards, Buildings S39 and S110, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

40. Real Property Record Cards, Building T143, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

41. Real Property Record Cards, Structure 184, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

42. Real Property Record Cards, Building 186, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

43. Real Property Record Cards, Building 355, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

6. Waiting Shelter (Building S357)

In fiscal year 1967, a 6' by 6' concrete block waiting shelter, with asbestos shingle roof, was erected. It was sited at the intersection of Magruder Road and Gunnison Drive, across the road from mess hall 56.[44]

7. Pumphouse (Building 358)

In fiscal year 1971, a concrete block water pumphouse, costing $7,100, was erected. It was sited west of Randolph Road and north of the underground reservoir.[45]

8. Tennis Court (Structure D1)

In 1956, a tennis court was laid out south of Building 67 (the post theatre) at a cost of $2,100.[46]

9. Twenty-Seven-Unit Trailer Park (Structure D7)

In 1951, a trailer park with utility facilities for 24 mobile homes was laid out at a cost of $15,000, east of Building 74.[47]

I. Construction of Secondary Sewage Treatment Plant

In January 1972, the Defense Department, pressured by New Jersey Senator Case, agreed to seek funds to halt water pollution at nine of its New Jersey installations. Among those named was Fort Hancock. Some six weeks before the State Director of Water Resources had ordered the subject military installations either to upgrade existing primary sewage treatment plants to secondary facilities or to tie into regional systems.

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44. Real Property Record Cards, Building S357, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

45. Real Property Record Cards, Building 358, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

46. Real Property Record Cards, Structure D1, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

47. Real Property Record Cards, Structure D7, Fort Hancock, Files, Sandy Hook Unit, Gateway National Recreation Area.

At Sandy Hook, where the Army had been discharging primary sewage effluents into the ocean, the military was studying designs for a secondary sewage treatment system.[48] Consequently, the Pentagon allotted $322,000 for construction of a secondary sewage treatment plant on the Fort Hancock reservation. The facility was placed under contract during fiscal year 1972 and completed in 1973.[49]

J. Use of Structures

1. Buildings Used by SAM Personnel, June 1958

Structure No.	Structure Use	Structure No.	Structure Use
1	Officers' quarters	266	Storage
2	Officers' quarters	301	Bn. supply office
3	Officers' quarters	302	Headquarters
4	Officers' quarters	303	Motor repair shop
5	Officers' quarters	304	Officers' latrine
6	Officers' quarters	315	Mess hall
7	Officers' quarters	333	NCO quarters
9	Officers' quarters	401	Acid storage bldg.
10	Officers' quarters	402	Barracks
11	Officers' quarters	403	Barracks
12	Officers' quarters	404	Barracks
13	Officers' quarters	405	Barracks
14	Officers' quarters	406	Latrine
15	Officers' quarters	407	Boiler house
16	Officers' quarters	409	Intercom corridor and control vans
17	Officers' quarters	410	Electric generator
18	Officers' quarters	411	Intercom corridor and control vans
20	NCO quarters	414	Electric generator
22	Barracks	417	Target tracking radar
23	Barracks	418	Acquisition radar
24	Barracks	419	Missile tracking radar
25	Barracks	420	Target tracking radar
27	BOQ	421	Acquisition radar
29	NCO quarters (2 fam)	422	Missile tracking radar

48. Asbury Park Evening Press, November 30, 1971, January 12 and March 1, 1972.

49. Real Estate Utilization Inspection Report, May 4-5, 1972, Fort Hancock, Files, Post Engineer, Fort Dix, New Jersey.

Structure No.	Structure Use	Structure No.	Structure Use
30	NCO quarters (2 fam)	423	Sentry booth
S-38	Guardhouse	424	Sentry booth
S-41	Storehouse	425	Missile storage
S-42	NCO quarters	426	Missile storage
52	NCO quarters (2 fam)	427	Missile storage
55	Mess hall	428	Missile storage
56	Mess hall	429	Generator bldg.
57	Mess hall	430	Barracks
58	Mess hall	431	Barracks
71	NCO quarters (2 fam)	432	Barracks
72	NCO quarters (2 fam)	433	Barracks
73	NCO quarters (2 fam)	434	Latrine
75	NCO quarters (2 fam)	435	Boiler house
80	NCO quarters	441	Storage
S-100	NCO quarters (4 fam)	442	Igloo magazine
104	NCO quarters	443	Igloo magazine
124	Instruction bldg.	447	Sentry booth
125	Missile assembly and test bldg.	448	Sentry booth
144	Officers' quarters (2 fam)	449	Missile assembly and test Warheading bldg.[50]
145	Officers' quarters (2 fam)		
261	Communication bldg.		

2. Use of Fort Hancock Military Reservation Buildings: 1960-70

No.	Utilization 1960	Utilization 1970
1	Officers' quarters	Officers' quarters
2	Officers' quarters	Officers' quarters
3	Officers' quarters	Officers' quarters
4	Officers' quarters	Officers' quarters
5	Officers' quarters	Officers' quarters
6	Officers' quarters	Officers' quarters
7	Officers' quarters	Officers' quarters
8	Officers' quarters	Officers' quarters
9	Officers' quarters	Officers' quarters

50. Data taken from "New York Defense (SAM) Installations, Basic Information Maps, General Site and Building Use Plan, Site No. NY-56-DC (Fort Hancock)," June 25, 1957.

No.	Utilization 1960	Utilization 1970
10	Officers' quarters	Officers' quarters
11	Officers' quarters	Officers' quarters
12	Officers' quarters	Officers' quarters
13	Officers' quarters	Officers' quarters
14	Officers' quarters	Officers' quarters
15	Officers' quarters	Officers' quarters
16	Officers' quarters	Officers' quarters
17	Officers' quarters	Officers' quarters
18	Officers' quarters	Officers' quarters
19	Infirmary	(Department of Commerce,
20	NCO Quarters	National Marine Fisheries Service)
21	2F NCO quarters	2F NCO quarters
22	Barracks	
23	Barracks	None
24	Barracks	Army Reserves (educational center)
25	Barracks	Army Reserves
26	Post headquarters	Post headquarters
27	BOQ	BOQ
28	Provost Marshal's office	Sandy Hook Museum
29	2F NCO quarters	2F NCO quarters
30	2F NCO quarters	2F NCO quarters
31	Garage (16-car)	Garage (16-car)
32	QM office bldg.	Branch post office Family housing office
33	Bakery	None
34	Firemen's dormitory	Firemen's dormitory
35	Post chapel	Post chapel
36	NCO club	NCO club
37	Pumphouse (sewage)	Pumphouse (sewage)
T-38	Administration	
S-39		Waiting Shelter (built 1972)
40	Service club	Service club and gym
S-41	Administration	Sunday school and nursery
T-42	Administration	
43	Refrigeration	
44	Storehouse	Storage shed for craft shop
45	Shell warehouse	
S-46	Post library	Post library
47	Commissary	Commissary
T-49	Warehouse (QM)	Family housing warehouse
50	Storehouse	
51	Firehouse No. 1	Fire Department garage
52	2F NCO quarters	2F NCO quarters
53	Administration	Laundromat, youth center
S-54	Warehouse (QM)	Family housing warehouse
55	Mess hall	Army Reserve mess hall

No.	Utilization 1960	Utilization 1970
56	Mess hall	Army Reserve mess hall
57	Mess hall	Army Reserve mess hall
58	Mess hall	Army Reserve mess hall
T-59	Warehouse	Army Reserve mess hall
60	PX filling station	PX service station
61	Flagpole	Flagpole
S-62	Passage (covered)	
S-63	Mess Hall	
64	NCO quarters	NCO quarters
65	Storehouse (Ord.)	Craft shop
66	2F NCO quarters	2F NCO quarters
67	Theatre No. 1	Theatre
T-69	Garage (1 car)	Garage (1 car) Qtrs. 18
70	Post exchange	Barber shop, cafeteria, post exchange, and laundry
71	2F NCO quarters	2F NCO quarters
72	2F NCO quarters	2F NCO quarters
73	2F NCO quarters	2F NCO quarters
74	Barracks and mess hall	C Btry. 3/51 Arty.
75	2F NCO quarters	2F NCO quarters
76	Firehouse No. 2	
77	Recreation	
79	Storehouse (paint)	Fire Department, storage
80	NCO quarters	NCO quarters
T-83	Scale house	
84	2F NCO quarters	2F NCO quarters
85	Garage (2-car)	Garage (2-car)
S-100	4F NCO quarters	
T-101	Civilian dormitory 75-man	
102	Barracks and mess (Navy)	Coast Guard
S-103	Administration	
T-104	NCO quarters	NCO quarters
107	Sewage pumphouse	sewage pumphouse
108	NCO quarters	NCO quarters
109	School	108th Military Intel. Gp. Admin. and Ops.
S-110		Waiting shelter (built 1972)
112	Officers' quarters	Officers' quarters
113	Caddy house	Barbecue pit and storage house for Officers' club
114	Officers' club	Officers' club
116	Barracks	
117	Barracks	
118	Barracks (Navy)	
T-119	Barracks (Navy)	Coast Guard
T-120	Barracks (Navy)	Coast Guard
123	St. Mary's Chapel	Catholic services

No.	Utilization 1960	Utilization 1970
124	Instruction bldg.	Post vehicle storage
125	Motor shop	Post transportation vehicle storage
130	Post engineer shops	Post engineer shops and supply facility
131	Paint shop	P.M. and I. and R. shops
132	Motor pool shop	Transportation motor pool
133	Garage	
134	Storehouse (paint)	Paint storage
CG-141	4F NCO quarters	
CG-142	4F NCO quarters	
T-143	Post gas station	Gas dispensing station
144	2F officers' quarters	2F officers' quarters
145	2F officers' quarters	2F officers' quarters
T-148	Storehouse and administration	
T-149	Barracks	
T-150	Barracks	
T-151	Barracks	
T-152	Barracks	
T-153	Barracks	
S-155	Post engineer office	Post engineer office
T-156	Warehouse (post engineer)	Post engineer warehouse
T-157	Storehouse and administration	
157		Public toilet (built in 1973)
S-164	Guesthouse	1st Army rec area billet
S-165	Guesthouse	1st Army rec area billet
S-166	Guesthouse	1st Army rec area billet
S-167	Guesthouse	1st Army rec area billet
S-168	Rec center	Rec area mess hall
S-169	Mess hall	Rec area administration building
S-170	Theatre	Recreation building
S-171	BOQ	Navy Reserve
179	Beach club (EM)	North beach bathhouse
180	Storage	Battery Peck
181	Storage	Battery
182	Fuel storage tank	Fuel storage tank (420,000 gals)
184	Paint storehouse	Paint storage
T-185	Storehouse	Acid storage
186	Pumphouse	Fuel pump house
T-187	Motor repair shop	Auto craft shop
T-200	Warehouse (QM)	
T-201	Warehouse (QM)	
T-202	Barracks	
T-203	Barracks	
T-204	Barracks	
T-206	Pumphouse (sewage)	Sewer pumphouse
T-207	Storage	

No.	Utilization 1960	Utilization 1970
T-211	Barracks	
T-212	Barracks	
T-213	Barracks	
T-214	Storehouse and administration	
T-216	Barracks	
T-218	Storehouse and administration	
T-219	Recreation	
T-220	Barracks	
T-221	Barracks	
T-222	Barracks	
T-223	Barracks	
T-224	Mess hall	
T-225	Barracks	
T-226	Mess hall	
T-227	Storehouse and administration	
T-228	Recreation	
T-229	Storehouse and administration	
T-230	Recreation	
T-231	Recreation	
T-232	Storehouse and administration	
T-233	Barracks	
T-234	Mess hall	
T-235	Barracks	
T-236	Barracks	
T-237	Barracks	
T-238	Barracks	
T-239	Barracks	
T-240	Barracks	
T-241	Mess hall	
T-242	Mess hall	
T-243	Storeroom and administration	
T-244	Recreation	
T-245	Storeroom and administration	
T-246	Recreation	
T-247	Recreation	
T-248	Storeroom and administration	
T-249	Barracks	
T-250	Barracks	
T-251	Barracks	
T-252	Barracks	
T-253	Administration	
T-254	Motor maintenance	
T-256	Storeroom	
T-257	Storehouse	
T-258	Latrine	
T-259	Storehouse	
T-260	Storehouse	
T-261	Administration	
T-262	Storage	
264	Storage	Battery Potter

No.	Utilization 1960	Utilization 1970
T-265	Storage (stable)	
266	Storage	Battery Granger
300	Storehouse	Storage (Army Reserve)
301	Administration	Motor maintenance (Army Reserve)
302	Administration	Motor maintenance (Army Reserve)
T-303	Motor repair shop	Motor maintenance (Army Reserve)
304	Storehouse	Motor maintenance (Army Reserve)
305	Signal maintenance technical unit	
306	Pumphouse (sewage)	Sewage pumphouse
307	Pumphouse (sewage)	Pumphouse
309	Magazine	
310	Sewer disp. plant	Sewer plant
315	Mess hall	Trailer park storage
316	Storehouse	
317	Mess hall	Trailer park storage
318	Latrine	
319	Latrine	
320	Latrine	
321	Latrine	
T-322	Garage (2-car)	Garage-family housing
T-323	Garage (2-car)	Garage-family housing
324	Power plant	Marine laboratory
325	Tool shed	Marine laboratory
326	Morgue (formerly 54)	Marine laboratory
T-327	Carpenter shop (formerly T53)	Marine laboratory
T-328	Garage (6-car)	Garage (6-car)
T-329	Dispensary	Dispensary
T-330	Barracks	
S-331	Nurses' quarters	Naval Reserve
T-332	Barracks	Parolee barracks
T-333	BSQ	Bachelor Sgts. quarters.
T-334	Service club	
335	NCO quarters	NCO quarters
T-336	Garage (1-car)	Garage-family housing
337	Storage	Battery Gunnison
338	2F NCO quarters	2F NCO quarters
T-339	Garage (1-car)	
340	NCO quarters	NCO quarters
341	Pumping plant	Water treatment plant
342	Lime house	Lime storage
343	Aerator house	Aerator house
344	Storehouse	Sand house
T-346	Tool shed	Tool storage

No.	Utilization 1960	Utilization 1970
T-347	Pumphouse (sewage)	Pumphouse
348	Storage	Batteries McCook and Reynolds
349	Storage (bombproof)	Fallout shelter (bastion)
350	Storage	
T-352	Hospital ward	Marine laboratory
T-353	Hospital ward	Marine laboratory
354	Pumphouse	Pumphouse well No. 4
355	Pumphouse	Pumphouse well No. 5
356	Pumphouse	Pumphouse well No. 1
S-357	Waiting shelter (built 1967)	
358	Water pump N-TG (built 1971)	
401	Pumphouse (sewage)	Sewer pumphouse
T-402	Barracks 1C	Barracks IC
T-403	Barracks 2C	Barracks 2C
T-404	Barracks 3C	Barracks 3C
T-405	Barracks 4C	Barracks 4C
406	Latrine No. 1	Latrine No. 1
T-407	Boiler house No. 1	Boiler house No. 1
408	Technical (Navy)	
409	Connecting corridor	Connecting corridor
410	Generator house	Generator house
411	Connecting corridor	Connecting corridor
413	Sentry box	Sentry box
414	Generator house	Generator house
415	Officers' beach club	
S-416	Officers' beach club	
417	Target tracking radar	Target tracking radar
418	Acquisition radar	Acquisition radar
419	Missile tracking radar	Missile tracking radar
420	Target tracking radar	Target tracking radar
421	Acquisition radar	Acquisition radar
422	Missile tracking radar	Missile tracking radar
423	Sentry box	Sentry box
424	Sentry box	Sentry box
425	Missile storage bldg. No. 1	Missile storage bldg. No. 1
426	Missile storage bldg. No. 2	Missile storage bldg. No. 2
427	Missile storage bldg. No. 3	Missile storage bldg. No. 3
428	Missile storage bldg. No. 4	Missile storage bldg. No. 4
T-429	Generator bldg.	Generator bldg.
T-430	Barracks IL	Barracks IL
T-431	Barracks 2L	Barracks 2L
T-432	Barracks 3L	Barracks 3L
T-433	Barracks 4L	Barracks 4L
434	Latrine No. 2	Latrine No. 2
T-435	Boiler house No. 2	Boiler house No. 2
436	Administration	Administration
438	Gate guardhouse	Gate guardhouse
439	Guard hut	Guard hut

No.	Utilization 1960	Utilization 1970
440	Storage	Battery Mills
441	Storage	Battery Kingman
442	Igloo magazine	
443	Igloo magazine	
444	Igloo magazine	
445	Igloo magazine	
447	Storage (paint and oil)	Storage (paint and oil)
448	Sentry control station	Sentry control station
449	Missile assembly	Missile assembly
450	Warhead	Warhead
451	Pedestal	Pedestal
452	Equipment and operation	Equipment and operation
453	Pedestal	Pedestal
454	Equipment and operation	Equipment and operation
455	Tool shed	Tool shed
456	Guard shelter	Guard shelter
457	Storage	Storage
T-458	Dog kennel	Dog kennel
T-459	Air conditioning	Air conditioning
T-460	Air conditioning	Air conditioning
T-461	Conv. house	Conv. house
T-462	Conv. house	Conv. house
T-463	Conv. house	Conv. house
T-464	Conv. house	Conv. house
T-465	Conv. house	Conv. house
T-466	Conv. house	Conv. house
467	Target ranging radar	Target ranging radar
468	HIPAR bldg.	HIPAR bldg.
469	HIPAR base	HIPAR base
470	Provost marshal's office	Provost marshal's office
471	Gate house	Sentry station
472	Target tracking radar	Target tracking radar
473	Target tracking radar	Target tracking radar
500	NCO quarters	
501	Storehouse (Carp-Navy)	Coast Guard
502	Blacksmith shop (Navy)	
503	Locomotive house (Navy)	Vacant
504	NCO quarters	
505	Storehouse-oil (Navy)	
506	Warehouse (fireproof)	
CG-507	Latrine	
CG-508	Mine storehouse	
509	Storehouse (Navy)	Vacant
510	Storehouse (Navy)	Army using
CG-511	Mine-loading room No. 1	
512	Mine-loading room (Navy)	
CG-513	Salt water pumphouse	
514	Repair shop	
515	Repair shop	

No.	Utilization 1960	Utilization 1970
516	Storehouse	Marine laboratory
517	Storehouse TNT (Navy)	
CG-518	TNT bldg.	
519	Dock house	Marine laboratory
CG-520	Mine boathouse	
523	Water tank	Water tank
524	Control house	Control house
525	Garage (2-car)	
526	NCO quarters	
527	Garage (2-car)	
528	NCO quarters	
CG-530	2F NCO quarters	
CG-531	Radar shelter	
535	Engineer dock	
536	Quartermaster dock	Marine laboratory
537	Altitude valve house	
539	Storage (Navy)	Battery Morris
540	Storage (Navy)	Battery Urmston
541	Storage (Navy)	Mine casement
542	Garage	

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51st Air Defense Artillery.

71st Air Defense Artillery.

11th Antiaircraft Artillery Missile Battalion.

66th Antiaircraft Missile Battalion.

483d Antiaircraft Artillery Missile Battalion.

526th Antiaircraft Artillery Missile Battalion.

741st Antiaircraft Missile Battalion.

967th Antiaircraft Artillery Missile Battalion.

52d Artillery Brigade (Air Defense).

369th Artillery.

16th Artillery Group.

133d Engineer Battalion.

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Hugo, Victor J., with Edwin C. Bearss, August 21, 1981.

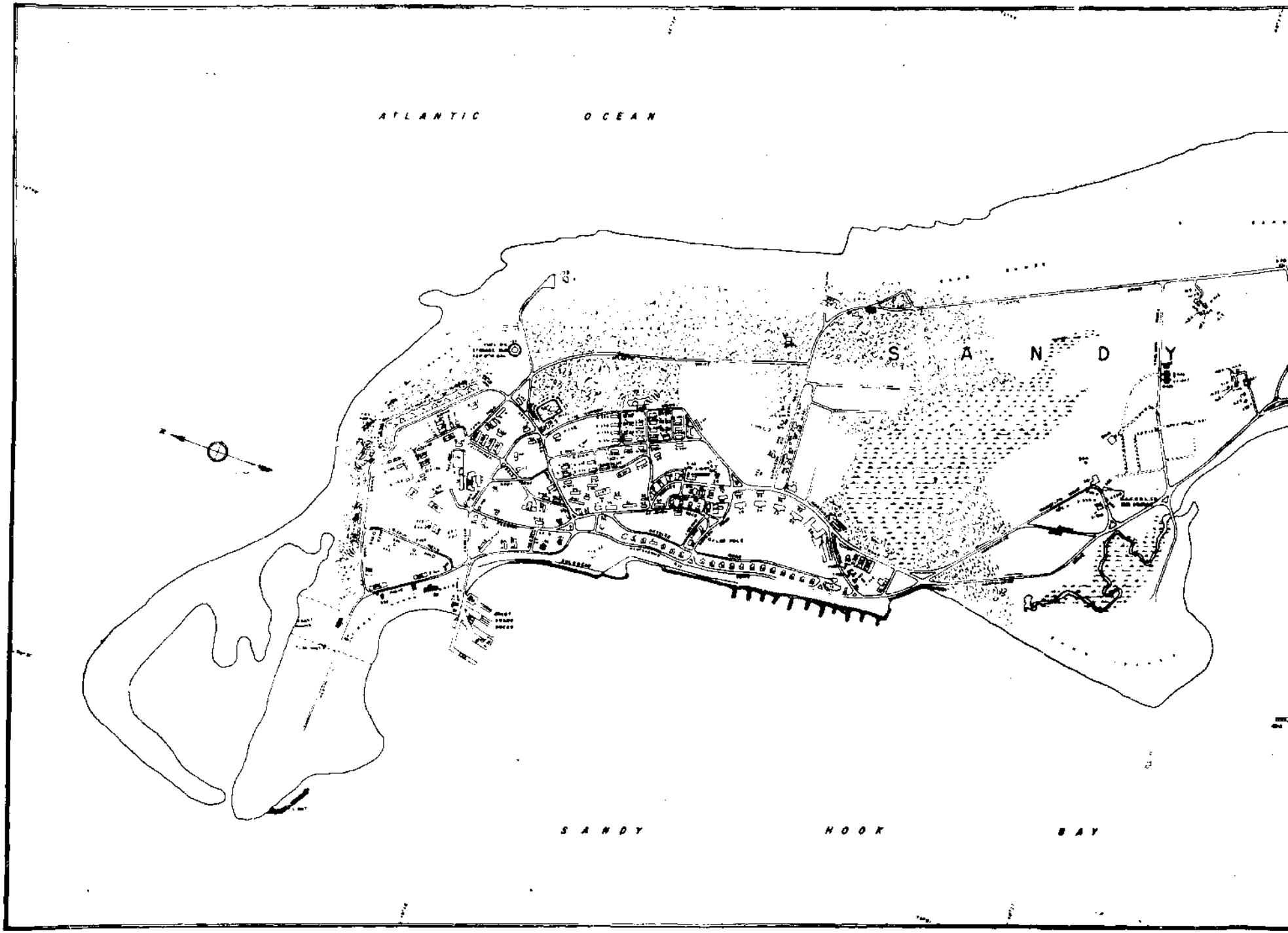
Hulick, Mike, with Edwin C. Bearss, May 1, 1980.

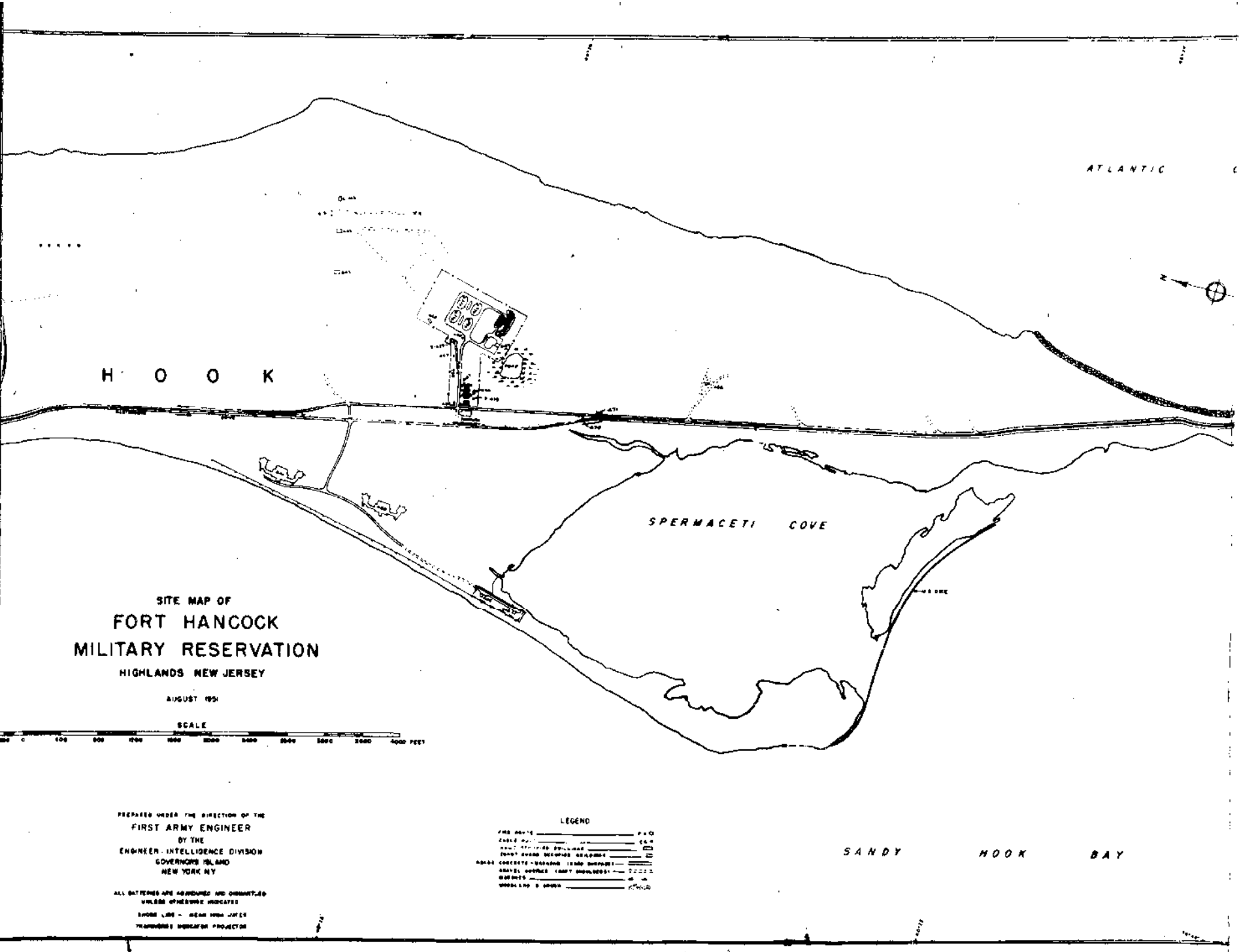
Singer, Margaret, with Edwin C. Bearss, August 5, 1980.

MAPS

Map No. 1

Site Map of Fort Hancock Military Reservation, Highlands, New Jersey, August 1951.


ATLANTIC OCEAN
SANDY
SANDY HOOK BAY



SITE MAP OF

FORT HANCOCK
MILITARY RESERVATION

HIGHLANDS NEW JERSEY

AUGUST 1951

SCALE

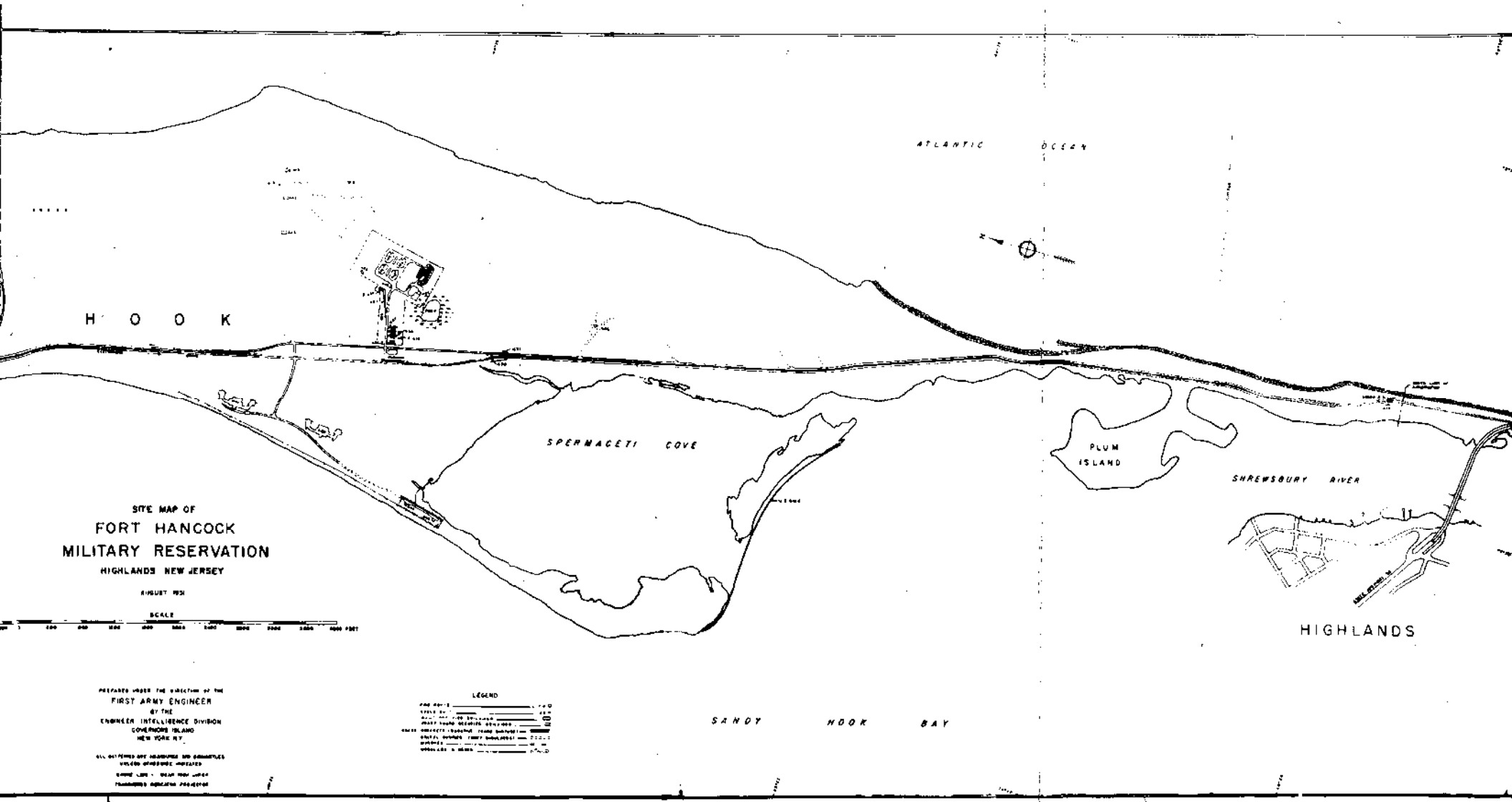
PREPARED UNDER THE DIRECTION OF THE
FIRST ARMY ENGINEER
BY THE
ENGINEER INTELLIGENCE DIVISION
GOVERNORS ISLAND
NEW YORK NY

ALL BATTERIES ARE ABANDONED AND DISMANTLED
UNLESS OTHERWISE INDICATED

BASE LINE - MEAN HIGH WATER

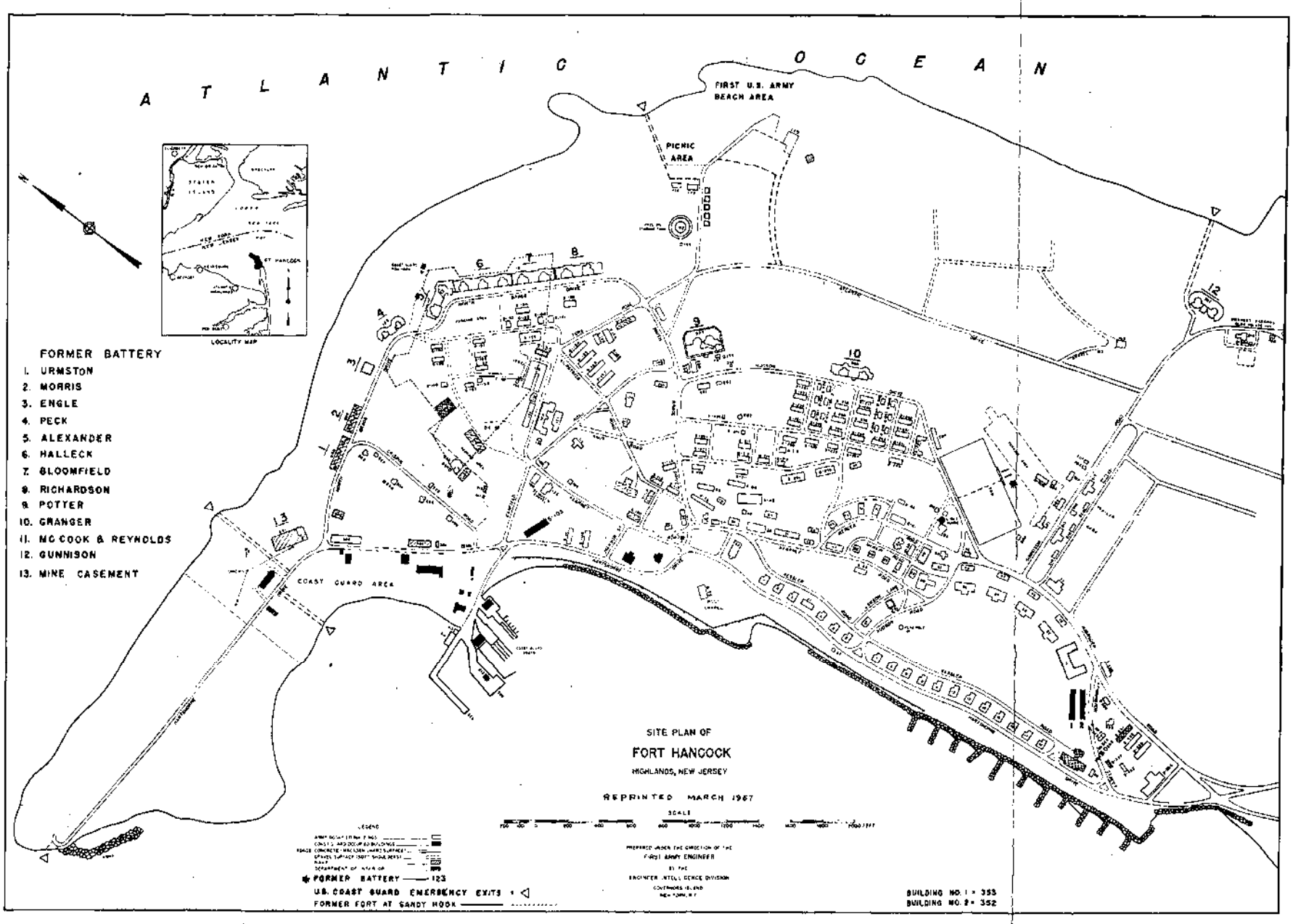
TRANSVERSE MERCATOR PROJECTION

LEGEND


ATLANTIC OCEAN
H O O K
SPERMACETI COVE
PLUM ISLAND
SHREWSBURY RIVER
HIGHLANDS
SANDY HOOK BAY
SITE MAP OF
FORT HANCOCK
MILITARY RESERVATION
HIGHLANDS NEW JERSEY
SCALE
LEGEND
PREPARED UNDER THE DIRECTION OF THE
FIRST ARMY ENGINEER
BY THE
ENGINEER INTELLIGENCE DIVISION
GOVERNORS ISLAND
NEW YORK N.Y.

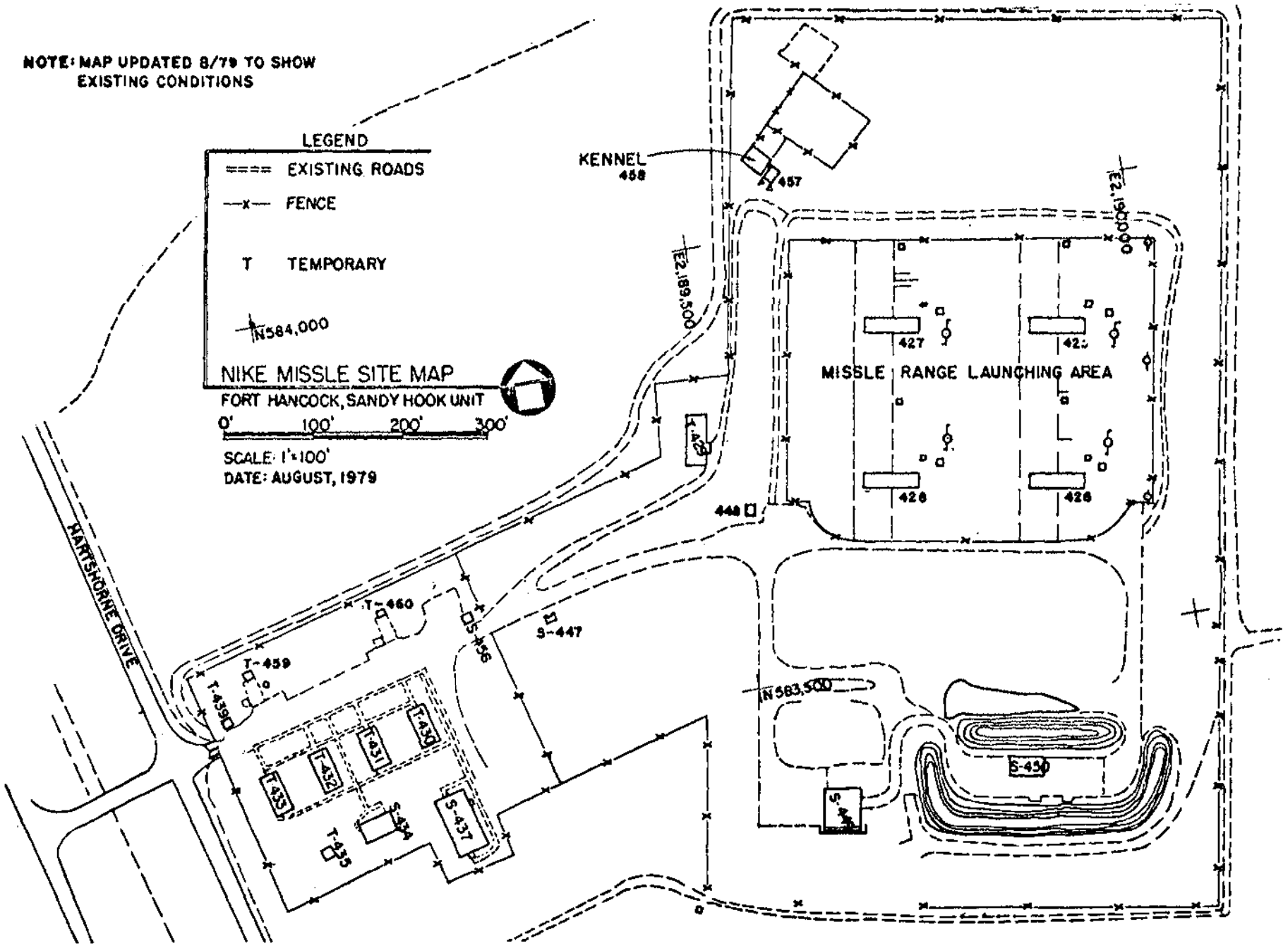
Map No. 2

Site Plan of Fort Hancock, Highlands, New Jersey, Reprinted March 1967.


ATLANTIC OCEAN
FIRST U.S. ARMY BEACH AREA
PICNIC AREA
COAST GUARD AREA
LOCALITY MAP
FORMER BATTERY
1. URMSTON
2. MORRIS
3. ENGLE
4. PECK
5. ALEXANDER
6. HALLECK
7. BLOOMFIELD
8. RICHARDSON
9. POTTER
10. GRANGER
11. MC COOK & REYNOLDS
12. GUNNISON
13. MINE CASEMENT
SITE PLAN OF
FORT HANCOCK
HIGHLANDS, NEW JERSEY
REPRINTED MARCH 1967
SCALE
LEGEND
FORMER BATTERY — 123
U.S. COAST GUARD EMERGENCY EXITS
FORMER FORT AT SANDY HOOK
BUILDING NO. 1 = 353
BUILDING NO. 2 = 352

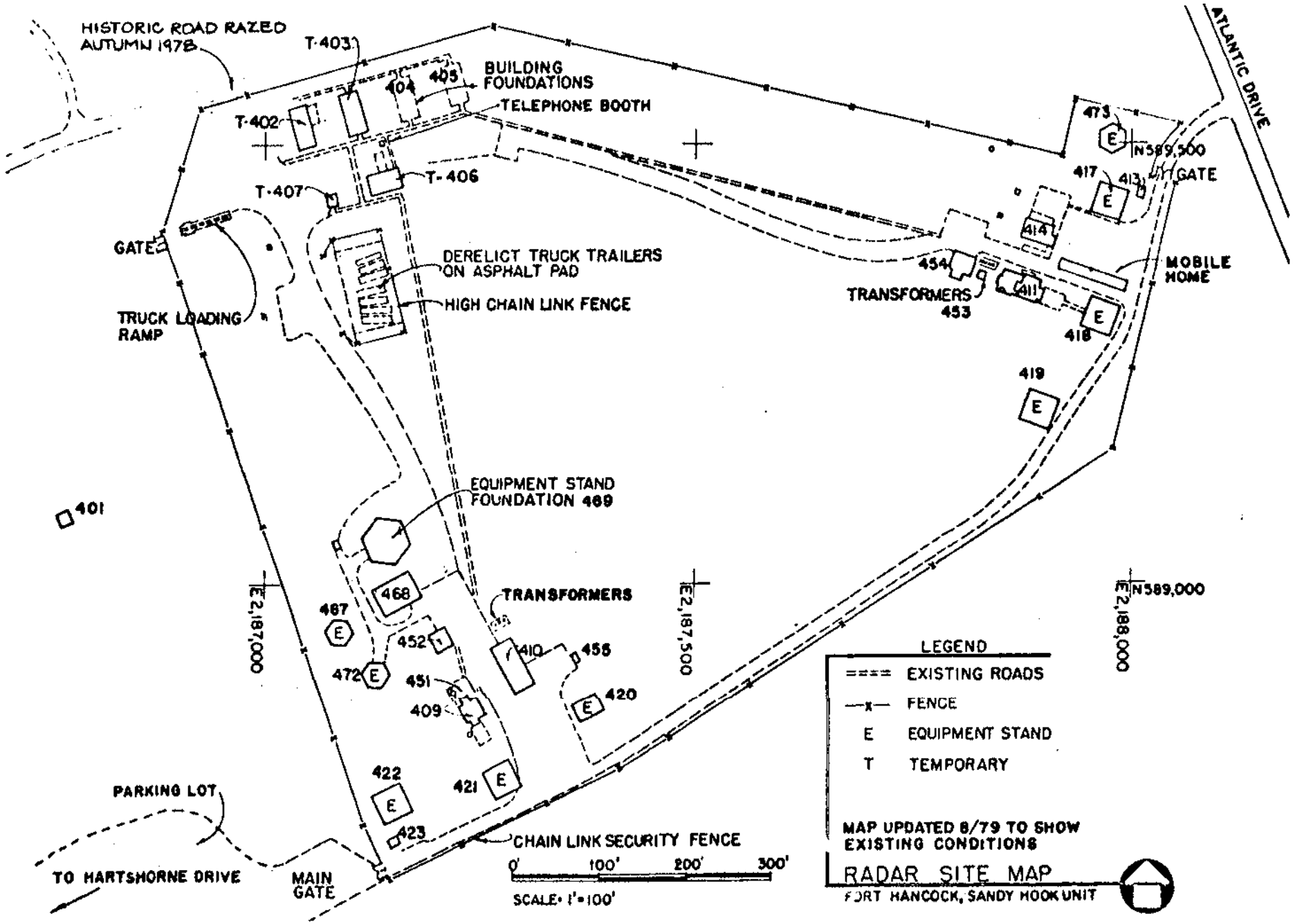
Map No. 3

Nike Missile Site Map, Fort Hancock, Sandy Hook Unit, August 1979.


NOTE: MAP UPDATED 8/79 TO SHOW EXISTING CONDITIONS
LEGEND
EXISTING ROADS
FENCE
T TEMPORARY
N584,000
NIKE MISSLE SITE MAP
FORT HANCOCK, SANDY HOOK UNIT
0' 100' 200' 300'
SCALE: 1"=100'
DATE: AUGUST, 1979
KENNEL
458
457
E2,190,000
E2,189,500
MISSLE RANGE LAUNCHING AREA
427
428
426
426
448
HARTSHORNE DRIVE
T-460
S-456
S-447
T-459
T-439D
T-439
T-431
T-432
T-433
S-434
T-435
S-437
N583,500
S-450
S-449

Map No. 4

Radar Site Map, Fort Hancock, Sandy Hook Unit, August 1979.


HISTORIC ROAD RAZED AUTUMN 1978
T-403
404
405
BUILDING FOUNDATIONS
TELEPHONE BOOTH
T-402
T-406
T-407
GATE
DERELICT TRUCK TRAILERS ON ASPHALT PAD
HIGH CHAIN LINK FENCE
TRUCK LOADING RAMP
ATLANTIC DRIVE
473
N589,500
GATE
417
413
414
454
TRANSFORMERS 453
411
MOBILE HOME
418
419
401
EQUIPMENT STAND FOUNDATION 469
468
TRANSFORMERS
467
452
410
455
472
451
409
420
422
421
423
E2,187,000
E2,187,500
N589,000
E2,188,000
PARKING LOT
TO HARTSHORNE DRIVE
MAIN GATE
CHAIN LINK SECURITY FENCE
0' 100' 200' 300'
SCALE: 1"=100'
LEGEND
==== EXISTING ROADS
—x— FENCE
E EQUIPMENT STAND
T TEMPORARY
MAP UPDATED 8/79 TO SHOW EXISTING CONDITIONS
RADAR SITE MAP
FORT HANCOCK, SANDY HOOK UNIT

PHOTOGRAPHS

All photographs in this section were selected from the collections of the Sandy Hook Museum, Gateway National Recreation Area.

Photograph No. 1

Under-Secretary of Army Alexander Tours First Army Installations, October 10, 1951. Mr. Archibald S. Alexander, Under-Secretary of the Army, conferring with high ranking officers during his visit to his post. L-R: Brig. Gen. Chester Charles, New Jersey Department of Defense; Brig. Gen. William Hamilton, Commanding General, 102d Antiaircraft Artillery Brigade; Lt. Gen. Willis D. Crittenberger, Commanding General, First Army; Mr. Alexander; Maj. Gen. Paul Rutledge, Commanding General, EAAC; Maj. Gen. Donald McGowan, New Jersey National Guard; and Col. Fred J. Woods, Post Commander.

U. S. Army Photograph.

Photograph No. 2

Santa Claus greets children and U. S. O. Hostesses at Service Club of Fort Hancock, N. J. Annual Christmas party held for children of military personnel, December 19, 1952.

Photograph taken by F. Manfredi.


SERVICE CLUB

Photograph No. 3

Col. Schabacker, CO of Fort Hancock, N. J. and Father Seehan greet Santa Claus as he arrives via Coast Guard helicopter, December 19, 1952.

Photograph taken by F. Manfredi.

Photograph No. 4

Lt. Gen. Thomas W. Herren, CG, 1st Army Area, as he prepared to board helicopter for return trip after tour of Fort Hancock, December 23, 1954.


NA45-T

Photograph No. 5

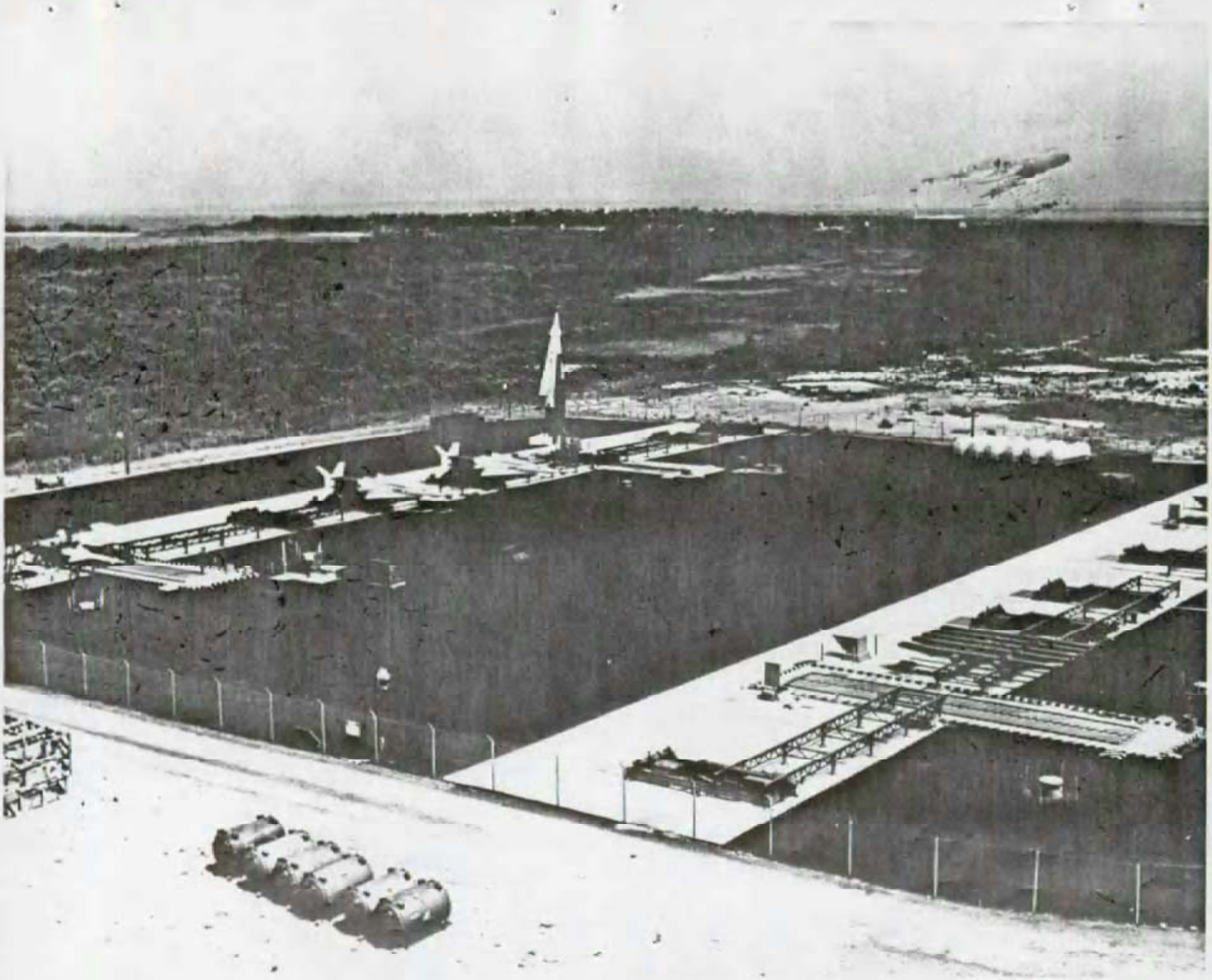
Acting Lt. Pvt. Kenneth E. Dicken and SP3 Audley M. Tate, both of Btry. B., 526th AAA Missile Bn., tracking a guided missile with radar tracking equipment, December 4, 1956.

U. S. Army Photograph.

Photograph No. 6

Aerial view of 1st Region Site No. 56, with headquarters, 52d AAA Brigade, Fort Wadsworth, and Staten Island, New York. Photograph made at an altitude of 150 feet, southwest of New York City, June 18, 1959.

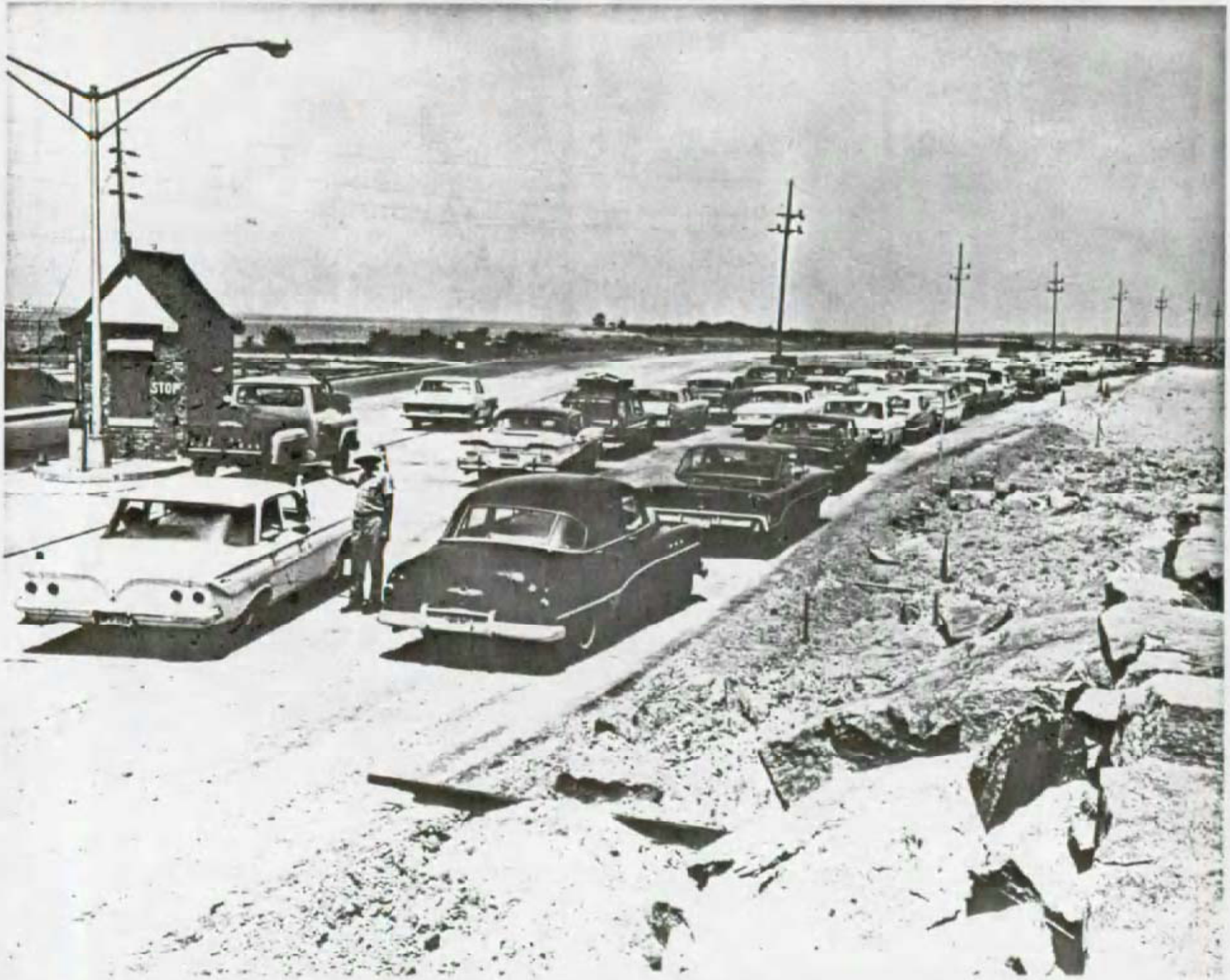
U. S. Army Photograph.



Photograph No. 7

Park entrance, Sandy Hook State Park, 1962.

Courtesy of Public Information, Office of the Commissioner, New Jersey Department of Conservation and Economic Development.

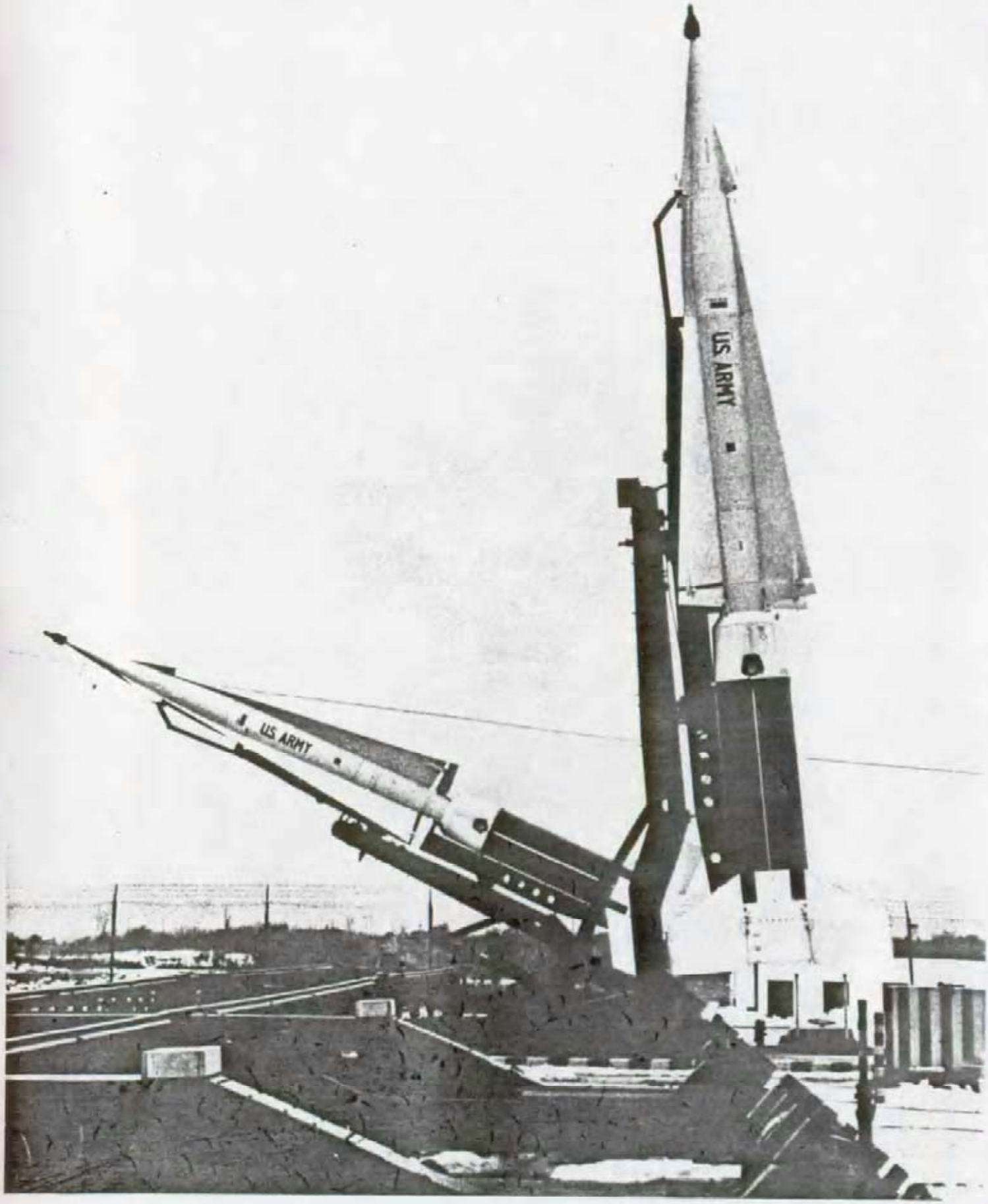

STOP

Photograph No. 8

Organization Day festivities, Fort Hancock, March 31, 1965.

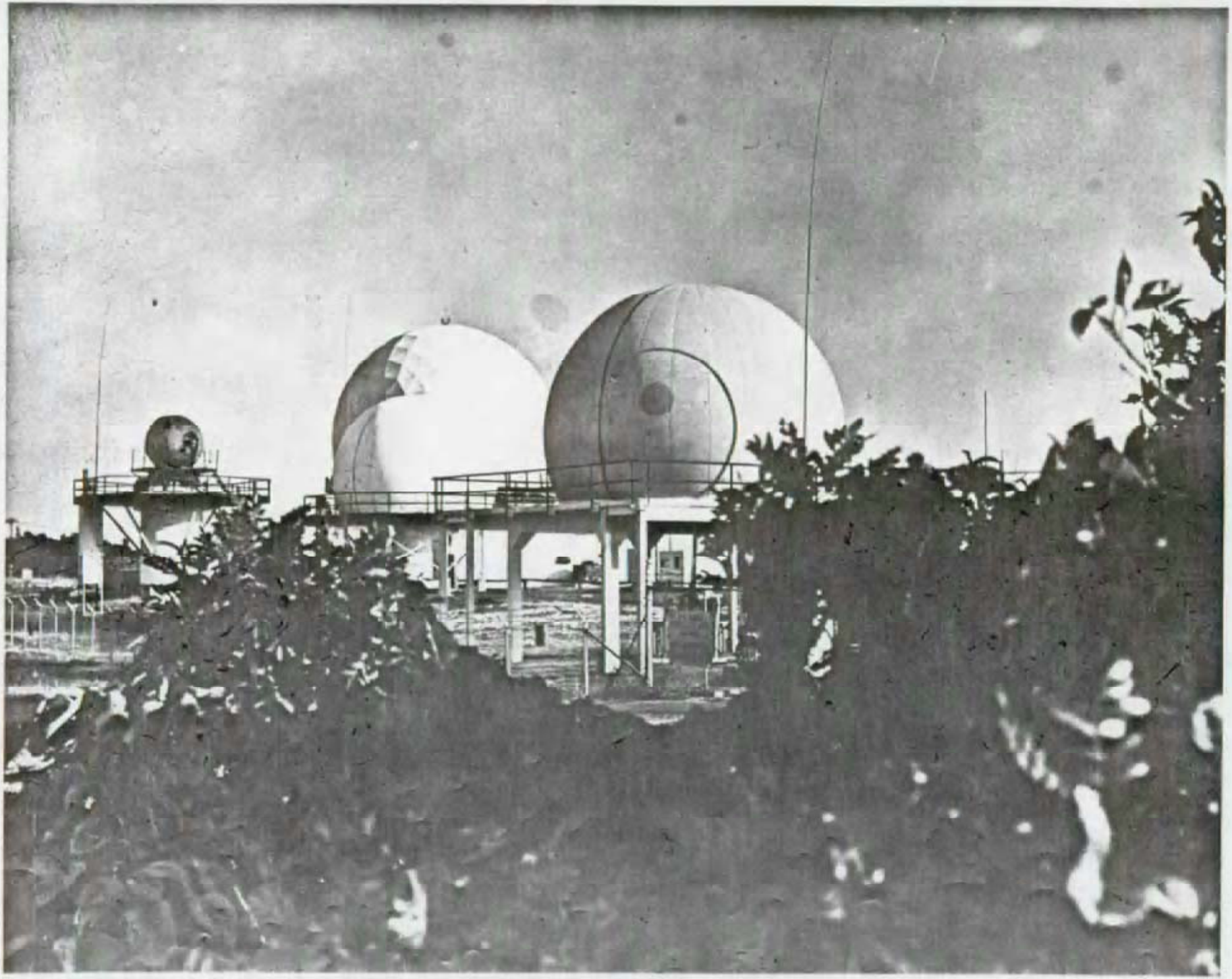
Photograph No. 9

Close-up view of NIKE-HERCULES missiles being raised into a firing position at the Fort Hancock Military Reservation Launching Site, ca. 1969.


US ARMY
US ARMY

Photograph No. 10

The Fort Hancock Military Reservation Radar Site showing the once familiar "Gold Ball" domes made of fibreglass that protected the delicate radar equipment from the weather, ca. 1969-73.



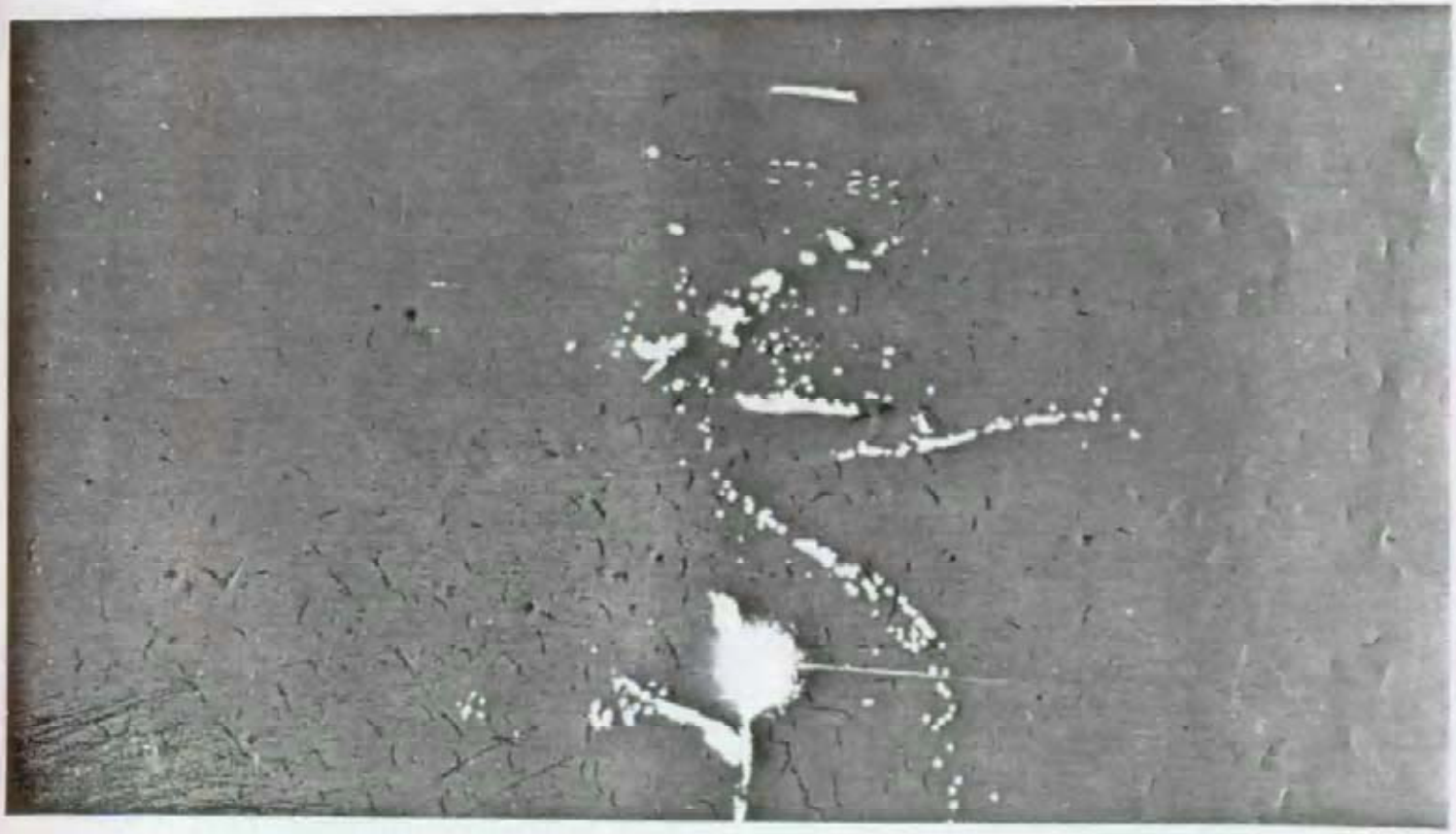
Photograph No. 11

Above: Map of lower New York Bay and surrounding territory (black star in center foreground represents location of radar).

Below: Image of same area on "plan-position-indicator" oscilloscope of Signal Corps radar located at Fort Hancock.

U. S. Army Photograph.


Brooklyn
Narrows
Staten Island
Coney Is
Lower
New York Bay
Rockaway Beach
Raritan Bay
Sandy
Hook
(Fort Hancock)
New Jersey
Sea Bright



As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by the graphics staff of the Denver Service Center. NPS 1978