

# HISTORICAL PERSPECTIVES INC.



March 4, 2016

Francis H. Henkels, Chair, Historic District Commission  
Helen Garten, Selectwoman and Chair, Historic District Commission Study Sub Committee  
Historic District Commission, Room 108, Town Hall  
110 Myrtle Avenue  
Westport, CT 06880

RE: Study Reports for Proposed Local Historic Property Designations

Dear Chair Henkels and Selectwoman Garten,

Historical Perspectives, Inc., in association with Robert Stewart of Historical Technologies, Inc., is pleased to submit the completed Historic Property Study Reports for two historic sites in Westport, the Golden Shadows residence on Compo Road South and the Nike Missile Site on Bayberry Lane. These documents are in fulfillment of the contract with the Town of Westport, as per the Certified Local Government Enhancement Grant from the Department of Economic and Community Development, State Historic Preservation Office Division.

These reports were completed by the combined efforts of three professionals: Robert Stewart, Nora Lucas, and Cece Saunders; all three are well versed in the physical, visual, and contextual requirements for historic designations. It was an engaging project and we thoroughly enjoyed delving deep into these two significant but highly distinctive properties.

As stipulated in the contract with the Town, these Historic Property Study Reports were undertaken “to determine the eligibility for historic designation” of portions of two town-owned properties. Both properties clearly meet the threshold of a local historic property. As a standard function of the determination process, we defined possible boundaries of each historic property based on research data, physical relationships, and integrity of association.

The Historic Property Study Reports provide a data base for future decisions by the town. It was not our task to envision a future use of the two properties, establish permanent ordinances, direct management of the land or interiors of the buildings in perpetuity, or direct the town to establish a specific set of boundaries at either location. Future municipal land management practices and future covenant decisions for the public good are to be informed by the two historic documentation records but are not directly defined by these reports.

Again, thank you for the opportunity to work on such two fascinating properties.

Sincerely,

  
Cece Saunders, President

cc: C. Leahy, HDC

**P.O. Box 529 • Westport • Connecticut • 06881**  
**203-226-7654 / [www.historicalperspectives.org](http://www.historicalperspectives.org)**

**STUDY REPORT FOR PROPOSED  
LOCAL HISTORIC PROPERTY DESIGNATION OF  
THE NIKE MISSILE RADAR SITE  
182 BAYBERRY LANE, WESTPORT, CT**

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**PREPARED BY  
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**PREPARED FOR  
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Appointed HDC Study Sub Committee:  
Helen Garten, Selectwoman, Chairman, Edward F. Gerber, Francis H. Henkels,  
Janet Rubel, Don Bergmann, and Kevin Green

HDC Staff Administrator: Carol Leahy

March 2016

## ACKNOWLEDGEMENT

The Town of Westport received support for the Study of the Nike Missile Radar Site from the Connecticut Department of Economic and Community Development with federal funds from the Historic Preservation Fund of the National Park Service, US Dept. of the Interior.

The contents and opinions do not necessarily reflect the views or policies of the Department or the Department of the Interior, nor does the mention of trade names or commercial products constitute endorsement or recommendation by the Department or the Department of the Interior.

This program receives Federal financial assistance through the Department for identification and protection of historic properties. Under Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973, the U.S. Department of the Interior prohibits discrimination on the basis of race, color, sex, national origin, or handicap in its federally assisted programs. If you believe that you have been discriminated against in any program, activity, or facility described above, please write to: Office of Equal Opportunity, U.S. National Park Service, 1849 C Street, NW, Washington, DC 20240.



Department of Economic and  
Community Development

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State Historic Preservation Office



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## **I. Introduction**

The purpose of this report is to document and evaluate the Westport, Connecticut property known as the Nike Missile Radar Site for designation as a local landmark. This Cold War complex, a total of 7.35 acres now owned by the Town of Westport, is located on the east side of Bayberry Lane immediately south of the Merritt Parkway corridor. Originally known as the BR-73 Nike Operations site, it was constructed in 1955 by the U.S. military as part of the defense of the City of Bridgeport; it has intact features such as repurposed military buildings being used for the health district office, municipal operations, archival storage and at one time a school. Today, the old radar towers are used for an astronomical observatory and a radio antenna tower.

There is a substantial record of the national Nike program, the background of the Cold War period, Army training manuals and personal reminiscences of individuals that are common to all Nike sites. The Westport site was part of a much larger system of air defense. To appreciate the significance of the BR-73 Nike Operations site, the historical development of the whole Nike defense system is presented for context.

This report is based upon just a small portion of the available historical material on the Nike systems, which have been well documented. The Nike sites had much in common; they used the same equipment, launchers and missile maintenance systems. Differences in layout were generally dictated by topography. Generally, drawings, photographs and operating data from most Nike installations may be applied to the Westport, Connecticut site.

## **II. The Development of Defense Systems**

From the time of the earliest settlements of North America through the cold war period, artillery was relied upon to defend against enemy attack. In Connecticut coastal forts such as Fort Trumbull in New London and Fort Griswold in Groton exemplified the technology and strategic thinking for defending the state against attack by sea. As an example, Fort Griswold has been designated as a State Archaeological Preserve.

Over the years military defense technology adapted to new weaponry and coastal defense forts, while staffed against naval attack during World War II, were obsolete. Rather, military strategy shifted to defense of attack from airborne enemy bombers. Consequently, instead of massive forts manned by coastal artillery, Connecticut cities and their vital industries were ringed by anti-aircraft gun emplacements. These were staffed, starting in 1954, by the Army Antiaircraft Command (ARAACOM). Anti-aircraft artillery became obsolete and by 1957 many of the Army's antiaircraft units had been converted to guided missile battalions. ARAACOM was re-designated U.S. Army Air Defense Command (ARADCOM). Essentially, the deployment of Nike missiles and their emplacements was a contemporary continuation of obsolete coastal artillery defense strategy.

The old coastal artillery forts were massive structures, many of which are extant and adapted for use as museums or parks. They were built to withstand bombardment and to last for centuries. Their demolition is problematical and very expensive. Military defense concepts evolved to encompass guided missiles rather than fixed artillery protected by massive fortifications.

The mid-20<sup>th</sup> century Nike sites were built with transportable equipment, wood and cinder block buildings and semi-permanent facilities. Looking at Nike sites one can conclude that Military thinking considered that forthcoming technology would make Nike obsolete within a few years. It would not be cost effective to expend money on permanent facilities. Subsequent users of an abandoned Nike site could build or adapt buildings to suit their purpose. A good example of this is the Nike site at Milford, Connecticut (BR-17). It remains a military facility under Air Force command. All equipment related to Nike Missiles and their operation has been removed. The original wooden buildings have been replaced by permanent brick structures. It is currently a maintenance and repair facility for Connecticut Air National Guard vehicles. The current status of all Connecticut Nike sites is shown in Appendix B.

The Nike program represented a continuance of Connecticut's defense facilities from Henry Whitfield's fortress settlement of 1639 through the era of sea-borne attack which was exemplified by the British attack on Essex in April, 1814. Coastal defense throughout the 19<sup>th</sup> and early 20<sup>th</sup> century continued with facilities and artillery located at Fort Griswold and Fort Trumbull. Later, Connecticut and its war industries were defended by the anti-aircraft emplacements of World War II. Nike missiles represented the leading edge of technology during the early stages of the Cold War and are a significant part of Connecticut's military history. They were replaced in part by the SAGE (Semi-automatic Ground Environment) system.

### III. Project Nike

The Nike program rationale must be examined in the context of Cold War strategic thinking. It could be viewed as an alternative to an earlier defense initiative, Mutually Assured Destruction (MAD). Under MAD the United States had sufficient nuclear missiles, in well-protected launch sites, to guarantee total destruction of an enemy's civic and military infrastructure in the event an enemy made a pre-emptive nuclear strike. Unfortunately, under MAD both sides would lose. With Nike, its development into the Sentinel, and the later Strategic Defense Initiative, plans evolved into a concept whereby enemy ballistic missiles could be intercepted in space, precluding damage to civilians, infrastructure and the environment. Development of SDI projects continues. The computer and radar technology developed in these missile defense systems have proven to be useful in being a driving force for improved computers and tracking systems that form the basis for commercial aircraft control. The technology has also been useful in space exploration.

By 1944 US Army planners recognized that German developments in rocket powered missiles and aircraft made existing anti-aircraft artillery weaponry outmoded. Prior to Nike, existing anti-aircraft weapon systems were not capable of defending against newly developed jet aircraft that flew at speeds and altitudes beyond the reach of conventional weaponry. US military requested proposals for a new defense system capable of combating the threat posed by jet aircraft. The genesis of American missile efforts arguably dates from January 1945 when the Chief of Ordnance authorized Bell Telephone Laboratories Inc. to develop data for an integrated anti-aircraft guided missile system capable of destroying high-speed and high-flying aircraft. Western Electric and Bell Telephone Laboratories were selected because of their success during WWII in developing and producing gun directors and tracking radar sets. Nike originally was referred to as "major caliber anti-aircraft rocket torpedo".

The Bell Labs system adopted technology from the WWII German Wasserfall missile for line-of-sight interceptions. In the same time period General Electric developed a long-range collision-course missile system. This was called project Thumper and produced the BOMARC missile. Bell Labs proposed the name of the mythological Greek goddess of victory, Nike, for the system in 1945. Its purpose was to develop a line-of-sight anti-aircraft missile system. At the time, the nation's air arm was known as the Army Air Forces (AAF) and was not reorganized as separate branch until 1947.<sup>1</sup> Consequently, defense against enemy aircraft was considered an Army responsibility and operations came under the aegis of Artillery.

The world's first operational, guided, surface-to-air missile system, the Nike Ajax, was deployed in 1954. Prior to 1962 it was designated SAM-A-7; MIM-3, 3A. Government agencies concerned with defense perceived that there was a direct Soviet bomber threat to the American mainland during the early years of the cold war. To cope with the threat, the Army rushed Nike Ajax into production and deployed the missile system around key urban, military, and industrial locations.

Subsequently, most of the technology and rocket systems used to develop the Nike Ajax were introduced in updated systems, many of which included the Nike designation. Nike's first-stage solid rocket booster propelled

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<sup>1</sup> [http://www.aafha.org/aaf\\_or\\_aircorps.html](http://www.aafha.org/aaf_or_aircorps.html)

a diversity of missiles ranging from the Nike Hercules missile to research vehicles such as NASA's Nike Smoke Rocket, used to obtain data on the upper atmosphere.

German scientists and engineers designed the Wasserfall during WW II to attack B-17 bombers flying at about 175 mph (280 km/h) at 25,000 feet (7,600 m). The Wasserfall's supersonic speed enabled it to be aimed directly at aircraft. No "lead" was needed. For daytime operations a manual radio control system assisted interception. Night operation required the missile to fly in the detection beam that it followed to the target. The missile's supersonic speed presented difficulties. The warhead had to be triggered by a ground-based operator. The missile's speed created uncertainty and if the blast were not precisely timed, the explosion would be too far away to bring down the aircraft. Efforts to develop an on-board proximity fuse for the Wasserfall were not successful by the time WWII concluded.

The post war generation of aircraft exhibited even higher speeds. Nike would have to destroy bombers flying at 500 mph (800 km/h) or more at altitudes of up to 60,000 feet (20,000 m). At those speeds and altitudes a supersonic rocket is no longer fast enough to be directly aimed at the target aircraft or missile. A "lead" had to be programmed into the missile's track to insure that its track and the target's track intersected before the rocket ran out of fuel. Consequently, the missile and the target were followed with dual radar sets. Analog electro-mechanical computers that embodied differential gears and electrical components were available and could integrate data from the radar sets and calculate the lead required for the missile to hit its target. During WWII these electro-mechanical computers were widely used on warships for target acquisition. The electro-mechanical analog computer concept was also used in the Norden bombsight.

For the Nike system, three radar sets were required. The target acquisition radar (TA) searched for a target and, once acquired, transmitted its location over to the Target Tracking Radar (TTR), the second radar set. A third radar, the Missile Tracking Radar, (MTR) traced the missile's path. The missile was equipped with a transponder<sup>2</sup>, since its radar signature was not large enough to insure reliable tracking. Missile control was also a function of the MTR using Pulse-position modulation. Radar pulses were received by the missile, decoded, amplified and sent back to the MTR to track. After the missile was launched, and the tracking radar sets locked onto the target and missile, the system was able to control the missile automatically. The computer integrated radar azimuths, speeds and distances of target and missile, to determine the intercept point and steer the missile. Bell System's electronics subsidiary, Western Electric designed and built the system. A diagram of the system is shown in Figure 2.

The Nike missile airframe, as built by Douglas Aircraft, was simpler than the German Wasserfall. Rocket design technology had progressed to the point where the Nike was 1/3<sup>rd</sup> of the Wasserfall's size and exhibited improved performance. Nike was a two-stage rocket with a solid fuel booster stage and a liquid fueled second stage. Picatinny Arsenal, New Jersey developed the High-Explosive (HE) fragmentation devices that made up the warhead and Frankford Arsenal, Pennsylvania, produced the fusing device. Aerojet Engineering supplied both the liquid-fueled second-stage engine and the solid-fueled booster rockets.

The Nike missile had a range of 25 miles (40 km). It could reach altitude of 70,000 feet (21 km) and achieve a maximum speed of 1,000-mph (1,600 km/h). The missile's warhead was unusual since its payload was not concentrated in one location. Rather, explosive fragmentation charges were located at three points along the length of the missile. This configuration gave greater odds of a destructive explosion on the target. Critics of the system believed that the limited twenty-five mile range of the Nike was a major defect because it forced location of the launch area close to the cities that were being protected.

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<sup>2</sup> A transponder is an electronic device that emits a distinctive electronic signature or code to identify the aircraft or missile in which it is mounted.

With the creation of the United States Air Force in 1947, inter-service disagreements came up between the Army and the new air branch. One of these was settled when long range missile systems were assigned to the Air Force in 1948. The Air Force worked with General Electric to continue Project Thumper and the BOMARC system. The Army continued to develop Nike. To operate batteries of anti-aircraft guns and missiles the Army formed the Army Anti-Aircraft Command (ARAACOM) in 1950. In 1957 ARAACOM was renamed the US Army Air Defense Command (USARADCOM). It simplified the acronym to ARADCOM, in 1961.

## **IV. Nike Ajax**

In November 1951 a Nike missile demonstrated effectiveness by intercepting a B-17 bomber configured as a target drone. Starting in 1953 Nike Ajax (MIM-3) missiles were deployed. The first production order included 1,000 missiles and 60 sets of launch and tracking equipment. See Appendix A for a set of Nike Ajax missile specifications.

They were located to protect cities, military installations as well as strategic and tactical sites within the US. Ultimately, the Nike Ajax contractor, Western Electric's Bell Telephone Laboratories, and many subcontractors produced 350 missile batteries for domestic and overseas deployment. Douglas Aircraft, the primary subcontractor, built 13,714 missiles at its Santa Monica plant and at the Army Ordnance Missile Plant located at Charlotte, North Carolina.

The first Nike site was located at Fort Meade, Maryland in December, 1953. By 1962 there were 240 launch sites which had replaced 896 radar-guided anti-aircraft guns protecting certain key sites. The only anti-aircraft artillery remaining in use by the US were a few 75-mm Skysweeper emplacements which were finally phased out in 1960. Missile battalions replaced Regular Army AAA units by 1957. The Nike Ajax system replaced Army National Guard weapons systems beginning in 1958.

Nike sites were divided into three areas. Construction requirements dictated that the launch area be separated by at least 1,000 yards from the other areas. At the Bayberry Lane site in Westport the launch area was about 1164 yards from the control area. The first area, designated by the letter "C", required about six acres and contained the Integrated Fire Control (IFC) radar systems. Their function was to detect, acquire and track incoming targets and to direct and track the Nike defensive missiles. The computer systems to plot and direct the intercept were also housed here. The second area, needing about forty acres and called "L" contained the launchers and missile storage. Here one to three underground missile magazines served a group of four launch assemblies. The forty-acre site provided some protection to the local community in the event of a missile malfunction. Launcher areas were generally off-limits to non-assigned personnel. Typically, a crew of 109 officers and men continuously manned missile sites. One launcher would be on 15 minutes alert, two on 30 minutes and one on two-hour alert.

Administrative activities were housed in a third area, "A". This area was usually located adjacent to the IFC/"C" area. The "A" area contained the battery headquarters, barracks, mess, recreation hall, and motor pool. Topography had a significant influence on the actual configuration of a Nike site. If practical, Nike sites were built on existing military bases.

The Nike batteries were placed as a ring around population centers and long-range bomber bases, nuclear plants, and ICBM sites. There was no fixed number of Nike batteries in an area. The number varied from two in the Barksdale AFB Defense Area to a high of twenty-two around Chicago. The numbering system in the Continental United States designated sites numbered from 01 to 99 starting at the north and increasing clockwise. Nike sites numbered 01 to 25 were to the northeast and east, those numbered 26 to 50 were to the southeast and south, those numbered 51 to 75 were to the southwest and west, and those numbered 76 to 99 were to the northwest and north. The Continental Defense Areas had a one or two-letter code associated with the city being defended. Thus those Nike sites starting with C were in the Chicago Defense Area, those starting

with HM were in the Homestead AFB/Miami Defense Area. For example, Nike Site BR-73L refers to the launcher area ("L") of the battery located in the southwestern part of the Bridgeport, Connecticut Defense Area (BR). See Figure 3 for a sketch of a Nike missile vault and elevator system.

Most of the components of the Nike system were either trailer mounted or installed in steel boxes similar to intermodal containers. These were readily transportable and were removed from Nike sites when the program was terminated.

Some Nike Ajax batteries were upgraded to the Hercules system in the early-to-mid 1960s. With greater range and more powerful warheads the new missiles had greater destructive force, consequently about half as many batteries were required to provide the same defensive capacity. Regular Army batteries were decommissioned or upgraded to the Hercules system. Army National Guard units were upgraded to Hercules in 1964. To save costs, the National Guard replaced Regular Army units, since the Guard units could live at home when off duty. With the deployment of the Hercules, Nike Ajax batteries were either modified to accept the new missile or deactivated. In November 1963, Site N-63, guarding Norfolk, Virginia, was the last Nike Ajax battery to be deactivated.

The development of Intercontinental Ballistic Missiles (ICBMs) made the Nike air defense system obsolete and the remaining Nike Hercules batteries were closed down starting in 1965. In 1965 Thule air defense was cut and SAC base defense in 1966. These cuts reduced the number of batteries to 112. Further budget cuts reduced the numbers to 87 in 1968, and 82 in 1969.

The Strategic Arms Limitation Treaty defined the Nike Hercules as an ABM. The treaty was signed in 1972, and after additional budget cuts, most all Nike sites in the continental United States were deactivated by April, 1974. A few units engaged in coastal air defense remained active until the end of the 1970s.

## **V. New England Defense**

With the availability of long-range missiles and aircraft after WWII, New England occupied a position of primary strategic importance. Manufacturing, especially military weaponry, was a dominant factor in the area's economy in the 19<sup>th</sup> and 20<sup>th</sup> centuries. The area's harbors, naval facilities, industries and densely populated areas required a high concentration of coastal fortifications. Originally these protected against attack by sea. After WWII, the threat came from airborne attack and this new strategic development required countermeasures to protect New England military manufacturing from potential attack during the Cold War.

This defense initiative continued a tradition of coastal defense that dated to the early 18<sup>th</sup> century. Several types of Cold War defenses were employed. Strategic Air Command (SAC) bases provided facilities for manned aircraft. One of the first, completed in 1950, was Loring Air Force Base (AFB) in Limestone, Maine. Others included Dow AFB in Bangor, Maine, completed in the early 1950s and Pease AFB in Portsmouth, New Hampshire activated in 1954. Other major installations of the Air Defense Command (ADC) included Otis AFB near Falmouth, Hanscomb Field in Bedford, Massachusetts and Ethan Allen Field in Burlington, Vermont.

In addition to the air force bases, a number of aircraft detection and warning systems were sited at Charleston, Bucks Harbor and Caswell, Maine and at North Concord, Vermont. A network of remotely controlled radar stations covered the gaps between the major installations. These were positioned to detect low-flying aircraft that penetrated under the sweep of the main stations or flew along the major river valleys.<sup>3</sup>

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<sup>3</sup> Parkman, *Army Engineers in New England*, p. 150.

During the 1950s radar-controlled 75-millimeter anti-aircraft batteries were installed near Loring and Dow bases in northern Maine, presumably to counter the threat of enemy bombers attacking over the polar route. A ring of radar-controlled 75-millimeter anti-aircraft batteries around Boston from Lynn in the north to Hull in the south was built at this time. A total of 35 Nike Ajax batteries were constructed in New England around strategic military or industrial areas in New England in a response to the Cold War (Stanko 1992).

## **VI. BR-73 Westport**

In 1955, the United States Army constructed seven Nike Missile bases to defend the industries and civilians around Bridgeport (i.e., the BR protection system). The Nike Missile program was an early response to a perceived threat. Major shortcomings included its limited range that necessitated site placement close to population centers. Launch sites housed some dangerous and toxic materials that, in the event of an accident, could have seriously damaged the areas they were designed to protect. It is doubtful that a Nike site could be placed close to a city today - environmental regulations would impose serious impediments. These concerns were addressed in the longer-range Hercules and Zeus; nevertheless, nuclear fallout from a successful hit on a target could have resulted in atmospheric contamination. Connecticut sites were not considered for upgrading.

The acquisition and construction of the Nike installations in Westport, BR-73A/C/L, were not without controversy. Correspondence between Col. A.C. Stewart, Chief of the Corps of Engineers Real Estate Division, Warren B Batts, Regional Engineer and W. D. Flanders, Esq. explored two possibilities for location of the Headquarters site (Flanders 12/7/54). The first site, a 9.24-acre "woodlot" accessed off Cross Highway by a 65-foot lane, was eliminated because its altitude proved too low for radar operation.

The second site, south of the Merritt Parkway and parallel to it, with access to Bayberry Lane was acceptable but only after protracted negotiations with the neighbors between Cross Highway and the Merritt Parkway overpass. As noted in a letter to the Army by legal counsel for Bayberry neighbors, "...there is every desire to cooperate on our part. On the other hand, they [Army] must recognize that the desire of the owners was a very natural one to have the installation as far from their homes as possible" (Flanders 12/7/54). This desire for distance was predicated on the intrusiveness of a 60-foot steel tower, the dangers inherent with the proximity of military targets, and the housing of up to 45 unmarried men on the premises. Public meetings were held to discuss all of the public concerns about the proposed BR-73, both the operations center on Bayberry Lane and the launch site off of North Avenue, which had already been flagged by the Board of Education for a new high school.

A survey of the final Westport site was ordered and construction scheduled to begin on May 1, 1955. The parcel was identified as tract A-111, the "Corner Lot" held by the Rabinowitz family under the name of Spear Securities Corporation. The land was taken by condemnation proceedings beginning on July 5<sup>th</sup>, 1955 at the U.S. District Court (Civil Action #5592). A total of 28 defendants were named. The parcel was described as:

Beginning at a point on the southerly side of the Merritt Parkway in the center of Bayberry Lane; thence northeasterly along the southerly side of the Merritt Parkway 662 feet more or less to a stone wall at land of the State of Connecticut; thence by said land of the State of Connecticut along stone walls southeasterly 123 feet more or less and northeasterly 213 feet more or less to a point; then South 30° 00' East through land of owner South 64°00' West 835 feet more or less to the center of Bayberry Lane; thence northwesterly by the center of Bayberry Lane 445 feet more or less to the point of the beginning. Containing 7.35, acres more or less.

Property owners between the control and launch sites were required to cut down trees and brush to assure that there was a clear line of sight between the areas. The missile tracking radar had to acquire the rocket from launch to target, which required the Army to abridge some property rights. The Army noted that thirty-two owners of thirty-four acres were involved (Ross 9/15/55). Newspaper accounts from the time noted that many

of the owners contended that the Army Engineers' representative was high handed. But the head of the Army Engineers in Boston "wasn't impressed by the complaints, which he said were a lot of baloney" (Ross 9/15/55).

After construction of the concrete-block operations building was begun next to Bayberry Lane, an emphatic protest by Westport residents was sent to the Army. The utilitarian building, a few courses of blocks already erected, was considered "quite out of keeping with the neighborhood" (Ross 9/15/55). The Army acquiesced to the demands and changed the footprint of the new building by moving it further to the east and away from Bayberry Lane and by adding a shrubbery screen along a barbed wire fence on Bayberry Lane. The missile launch site off of North Avenue included three silos (i.e., missile-discharging frames) and an underground shelter for ammunition storage.

A satirical novel describing the fictional travails of the Westport Nike site was written by Max Schulman. Rally Round the Flag, Boys! very loosely depicted the events surrounding Nike's arrival in Westport. In 1958, a movie of the same name starring Paul Newman and Joanne Woodward used the event as a basis for a romantic comedy. These actors subsequently became Westport residents.

BR-73 operated for less than ten years. The day to day operations and personnel assignments were absolutely standard U.S. Army practice; these national practices are described below. There was never a need to launch a missile from BR-73 before the technology made the complex obsolete. The Westport Nike Site BR-73 was deactivated in March of 1963. Appendix C provides the geographical data on the boundaries of BR-73A and BR-73C, the headquarters and control site as it was formed in 1955, operated through 1962, and survives intact today.

### **A. Housing at a Nike Site**

Generally, personnel assigned to the Nike program, regardless of Connecticut or California, generally lived in barracks located in the administrative area. This included launcher personnel who manned the missiles located away from the administrative and communications center. Individuals could live off site if they had a family located nearby. The barracks were simple wooden or cinder block structures with the lowest ranks sleeping dormitory style in rooms that slept 20 to 60 men. A footlocker at the base of each bed contained personal items in a lift out tray. Other private items were stored below this. A vertical locker for hanging clothing would be placed against the wall behind the bed. Non-commissioned officers sometimes shared a two-man room or possibly an individual room. Generally, there were individual officers' quarters or they lived off site.

Nike bases were supplied with mess facilities-complete kitchens and dining halls. Army cooks prepared and served rations and enlisted personnel generally provided clean-up labor (KP). Since personnel assigned to Nike were considered on combat duty, extra rations were provided. In general, proximity to civilian food distribution markets improved the availability of fresh and plentiful rations. Personnel tended to gain weight when stationed at a Nike base. The preparation of standard military recipes varied with the expertise and dedication of the cooks.

### **B. Equipment**

The equipment at a standard Nike base represented the cutting edge technology of the period. Maintenance requirements had to be performed by trained personnel on a daily, weekly and monthly basis. While the booster of the missile was a solid fuel type, the second stage of Nike Ajax missiles was liquid fueled with M3, a combination of JP4 jet fuel and starter fluid originally composed of aniline/furfural alcohol. Later dimethylhydrazine, and finally, red fuming nitric acid (IRFNA) replaced the aniline/furfural. These were toxic and dangerous propellants and initiators that had to be handled by trained personnel who could check and service the materials and delivery systems on a regular basis. There were also complex electrical test sets to check the missile electrical, guidance, hydraulic, propulsive and launching equipment.



Missile launches were preceded by several events. A warning of imminent attack would be sent to a Nike battery by an Air Defense Command Post. Battery personnel, alerted by sirens or a public address system, would sprint to their assigned battle stations. Launch personnel then ran final pre-firing checks and mounted the missiles on the launchers.

The incoming aircraft was picked up on a long-range target acquisition radar. In the Nike Ajax system, this radar was known as LOPAR for "Low-Power Acquisition Radar." The LOPAR search radar antenna rotated constantly. As targets appeared on the radarscope, the battery commander used a transponder system to see if the target responded to a predetermined code. Known as "electronic interrogation" it was the method used to determine if the target was friend or foe (IFF).

If the target was hostile this information was transferred to a target-tracking radar (TTR). The TTR computer calculated the target's azimuth, elevation, and range, and then automatically sent that information to a guidance computer for use in steering the Nike Ajax missile. When it came on line, the guidance computer received a continuous stream of information on the target's position.

The battery commander launched the missile when the hostile aircraft came within the battery's range. The missile booster generated 59,000 pounds of thrust within three seconds to push the missile off the launch rail then the booster dropped away as the second stage ignited. The missile accelerated through the sound barrier. Once the missile was in the air, the missile tracking radar received continuous data on the missile's flight. As the target tracking radar sent position updates the associated computer generated course correction information that guided the missile toward the target. When the missile reached the computed intercept a signal was transmitted that detonated the three high-explosive warheads. The explosives in the warheads were surrounded with two layers of 1/4 in (6 mm) hardened steel cubes.

In the period before invention of integrated circuits, "chips", LED displays, power supplies with solid state rectifiers and laser printers Nike technology required a lot of power-hungry electronic equipment. For dependability Nike sites had to be independent of the commercial grid. Above ground power was supplied by 40 kW generators providing 400 hertz AC. Underground power was provided by 150 kW, 60 hertz generators. Commercially purchased power was also used, with frequency converters used as necessary. The power was supplied to three radar sets, many cathode ray tube displays, DC power supplies using mercury vapor rectifiers and hundreds of vacuum tubes. There were also XY plotting boards, timers, calibration circuitry, voltage balancers, switches, relays and test equipment that required power. There are traces of a three-phase power system at the BR-73A/C site.

### **C. Enlisted Personnel Training:**

Operating personnel had to be highly trained in using, maintaining and understanding the complex equipment required to keep the system operational. Operators received some classroom training at Fort Bliss, near El Paso, Texas. The Military Occupational Specialty was MOS 16C (1967) ARADCOM. The course included training in fire control operations of radar sets, missile-tracking radar, target tracking radar, acquisition radar and computer operation.

After formal training, commanding officers interviewed and selected personnel for their batteries. Additional practice tested the application of theoretical material learned in class. Students did troubleshooting on faulty, mis-calibrated or defective electronic equipment for a few weeks before reporting to their battery.

Before 1959 each battery went to the Ajax test range at Red Canyon Range Camp for field training that involved fixing and adjusting radar sets purposely set up with "bugs" to test competence. Students fired a missile to shoot down radio controlled aerial target drones (RCAT). After 1959 and the introduction of the Nike Hercules they reported to McGregor Range and fired missiles at RCAT's.

The officers, generally 2nd lieutenants in Air Defense Artillery, received 15 weeks of an officer basic course. Officers took over all enlisted positions in a battery, operated the system and fired one Nike Ajax missile. Some officers were enrolled in a 30 weeks advanced course heavy on tactics and theory of operations. Other courses

included basic electronics, radio / radar, trouble shooting, Nike specific theory and advanced electronics. Later, a course in electronic counter measures (jamming) was added.

Other training included annual temporary duty at Red Canyon, New Mexico to launch three missiles during Annual Service Practice (ASP) or Short Notice Annual Practice (SNAP). Some training launches occurred in Alaska. As missile technology and capability improved a jet powered target drone that could reach higher speeds and altitudes was developed to increase realism in training exercises.

## **VII. Present Use of BR-73A and BR-73C**

Traces of the approximately 300 Nike missile bases can still be seen around cities across the country. As the sites were decommissioned they were first offered to Federal agencies. Many were already located on Army National Guard bases that continue to use the properties. Others were offered to state and local governments while others were sold to school districts. The remaining ones were offered to private individuals. Thus, many Nike sites are now municipal yards, communications and FAA facilities (the IFC areas), probation camps, and other uses. Several were completely obliterated and turned into parks. Some are now private residences. Only a few retain any integrity and preserve the history of the Nike project. There may also be a few sites abroad, possibly in Turkey and Greece. Nike site SF-88L in Marin County, north of San Francisco is essentially intact and has been restored as a museum within the National Parks System.<sup>4</sup>

Westport's Nike Headquarters and Control area has one of the most unusual modifications and adaptations of any former Nike site. In 1964, the U.S. government gave the Town of Westport the Bayberry property "without charge" as long as it was used for educational or health purposes. The original property owner, Aaron Rabinowitz, lobbied unsuccessfully for the construction of a new Westport Library branch on the Bayberry acreage (Hurley 1964). A public Bayberry Kindergarten School occupied the barracks building for a few years. It has remained in the public domain and serves the public in multiple functions. The former barracks, officer's quarters and headquarters building now houses the offices of the Westport-Weston Health District. The former recreation building and mess hall now houses Westport's archived records and a public works composting station. (See Figure 4) These are fairly typical uses for former Nike Sites.

In 1973 the Westport Astronomical Society leased the BR-73C portion of the site that housed generators, radar antenna towers, a recreational field and two concrete block buildings. (See Figure 4) The origins of the Society extend back to the mid-1960s when Nike was being phased out. A well-known amateur astronomer, Charles Scovil was approached by Rufus Morton, a local science teacher, for advice on building an astronomical observatory. A 12-inch telescope had been donated to Westport by Jerry Rolnick. Mr. Morton believed that one of the old radar antenna towers would make an excellent base for an observatory. The Society's organizers studied available astronomical domes and the Town supplied one. The society built a wood staircase to enable access to the top of the tower and a chain link fence to protect the tower. After several years of inactivity, the Society reorganized. The 12 ½ Newtonian Reflector telescope is now connected to computer software that aims it at operator directed portions of the sky.

## **VIII. Conclusion**

There were no victory parades or medals for veterans of the Cold War period who gave honest and faithful service as peacekeepers who were willing to serve their country. In 1955 the country faced a belligerent USSR and other formidable enemies. The Soviets had 175 divisions facing 21 NATO divisions. There was a credible threat of Soviet bombers attacking the industrialized cities of the United States. Strategic defense called for

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<sup>4</sup> The SF-88L web site offers a virtual tour of the facility at: [http://ed-thelen.org/t\\_self\\_guide.html](http://ed-thelen.org/t_self_guide.html)

watchfulness and devotion to duty. There were no medals of recognition for the troops who had to be on guard against surprise attack.

With the development of Intercontinental Ballistic Missiles capable of carrying nuclear warheads Nike became obsolete but for a decade it countered the threat of air attacks. Nearly all of the former Nike sites have been repurposed for civilian use. Some house vastly different military installations, others are parks or school grounds. Yet there are few commemorative signs that describe the significant function those sites were tasked with during the dark days of the Cold War years. Their service is often dismissed as "peacetime." This was an altered kind of service, a unique war, and it deserves recognition. The Cold War was an exceptional period in our history. It marked a period in technological advancement that led to the development of computers and enabled the exploration of space. The Nike sites deserve registration as historic places in Westport and Connecticut history.

## IX. Bibliography

### Web Sites:

The Strategic Defense Initiative: [http://en.wikipedia.org/wiki/Strategic\\_Defense\\_Initiative](http://en.wikipedia.org/wiki/Strategic_Defense_Initiative)

Guide-United States Nuclear Missiles: <http://www.fas.org/nuke/guide/usa/airdef/Nike-ajax.htm>

Comprehensive Technical and Personnel Information on the Nike Project:  
<http://ed-thelen.org/> (A useful web site for contacting former NIKE personnel).

Historic American Engineering Record reports: <http://memory.loc.gov/cgi-bin/ampage>

National Park Service Web Site for Nike Base SF-88L: [www.nps.gov/goga/nike-missile-site.htm](http://www.nps.gov/goga/nike-missile-site.htm)

Nike Sites of Connecticut: [http://coldwar-ct.com/Nike\\_Sites.html](http://coldwar-ct.com/Nike_Sites.html). Note: This website has additional photographs and interviews with former Nike personnel.

<http://www.was.ct.org> This is the website of the Westport Astronomical Society

### Reports:

HABS Recordation of NIKE Missile Battery PR-79, East Windsor Road south of State Route 101, Foster, Providence County, RI

HABS Recordation of NIKE Missile Base SL-40 (HABS No. IL-117), Beck Road in the vicinity of Hecker, Monroe County, Illinois.

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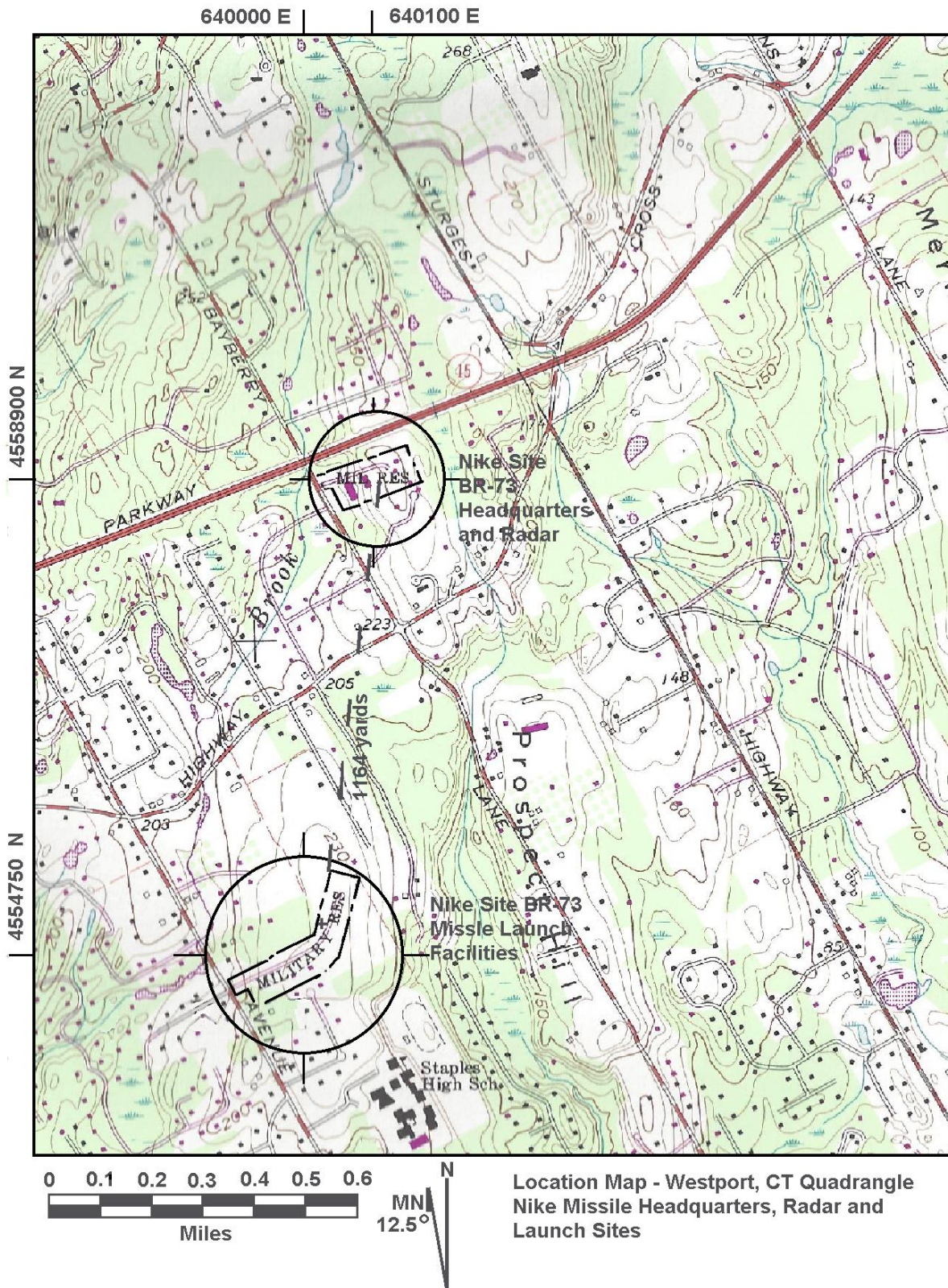


Figure 1 -Location of Westport Nike Sites (Defined as Military Reservations)

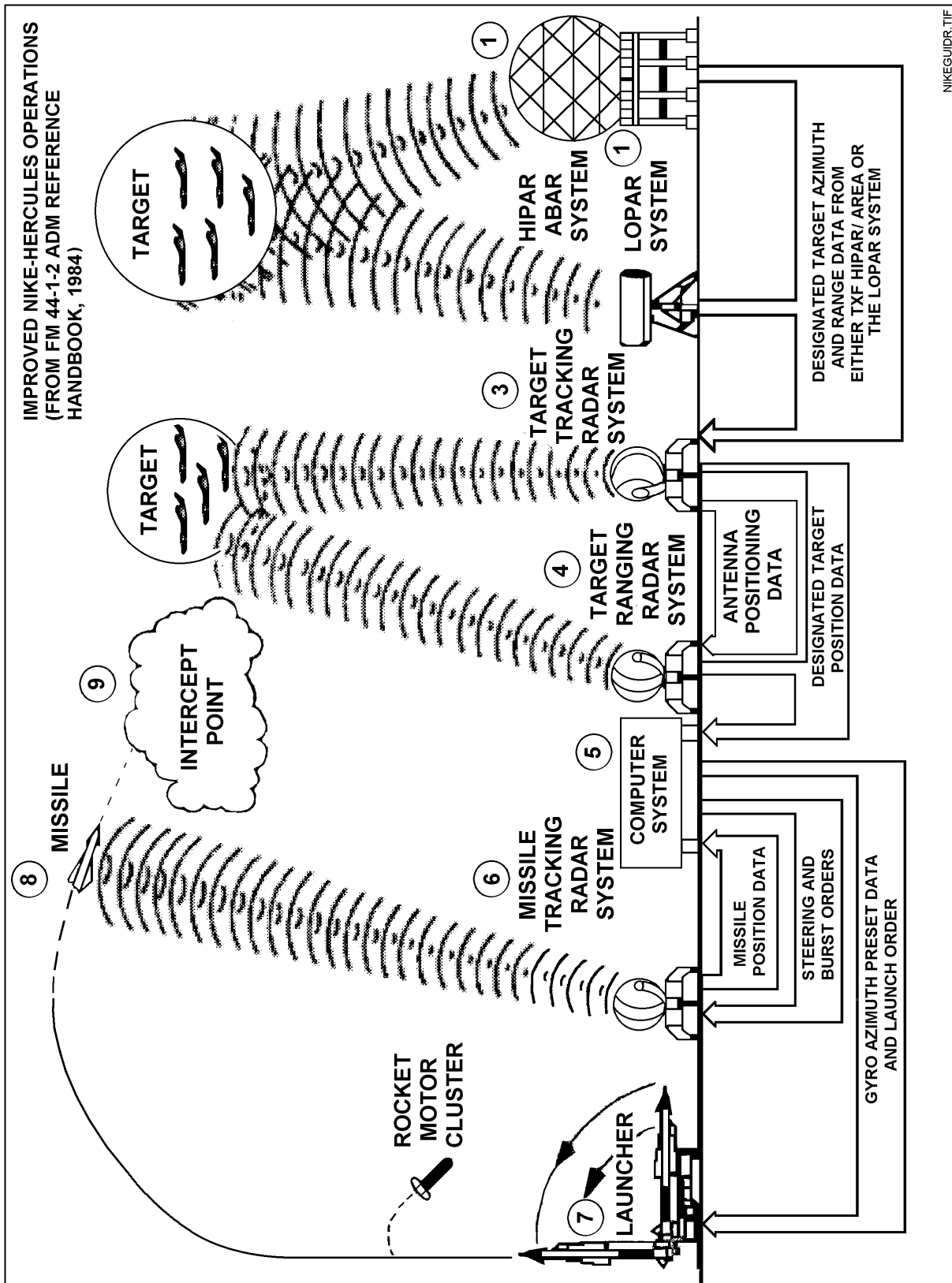
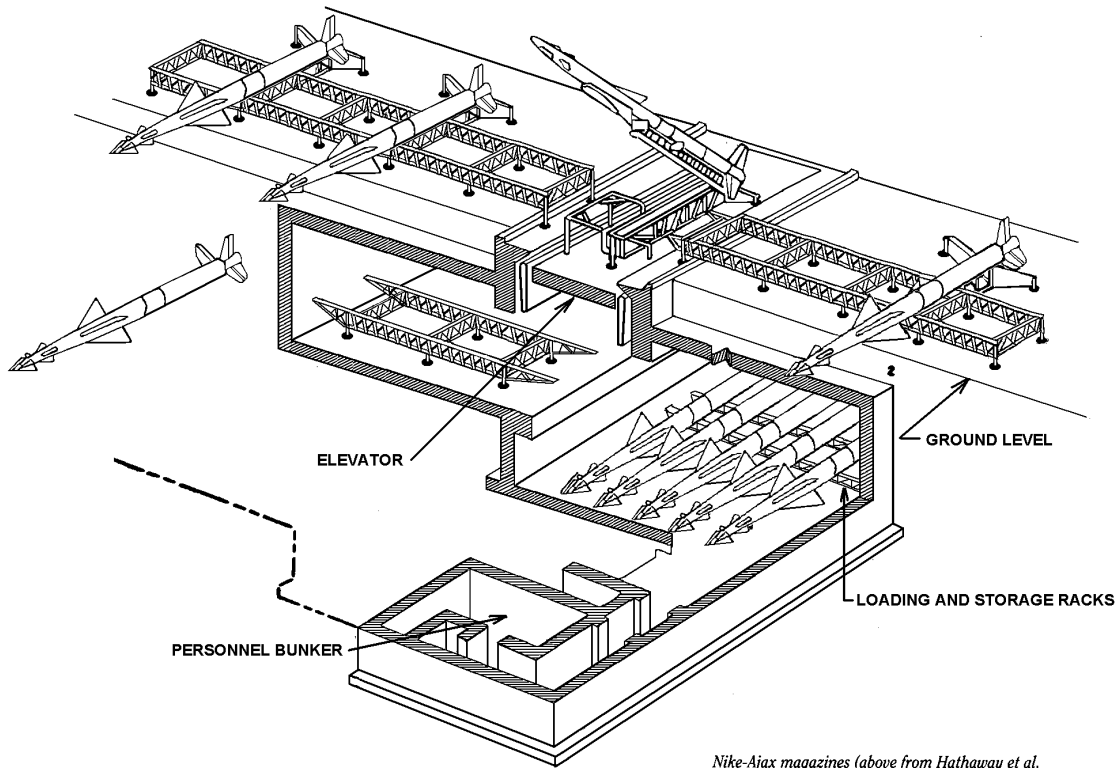


Figure 2 – Operation of the Nike missile system  
Mark Morgan & Mark Berhow, *Rings of Supersonic Steel*-p.16



*Nike-Ajax magazines (above from Hathaway et al, below from Annex D.GMP.11704, Fort Bliss, TX, 1957)*

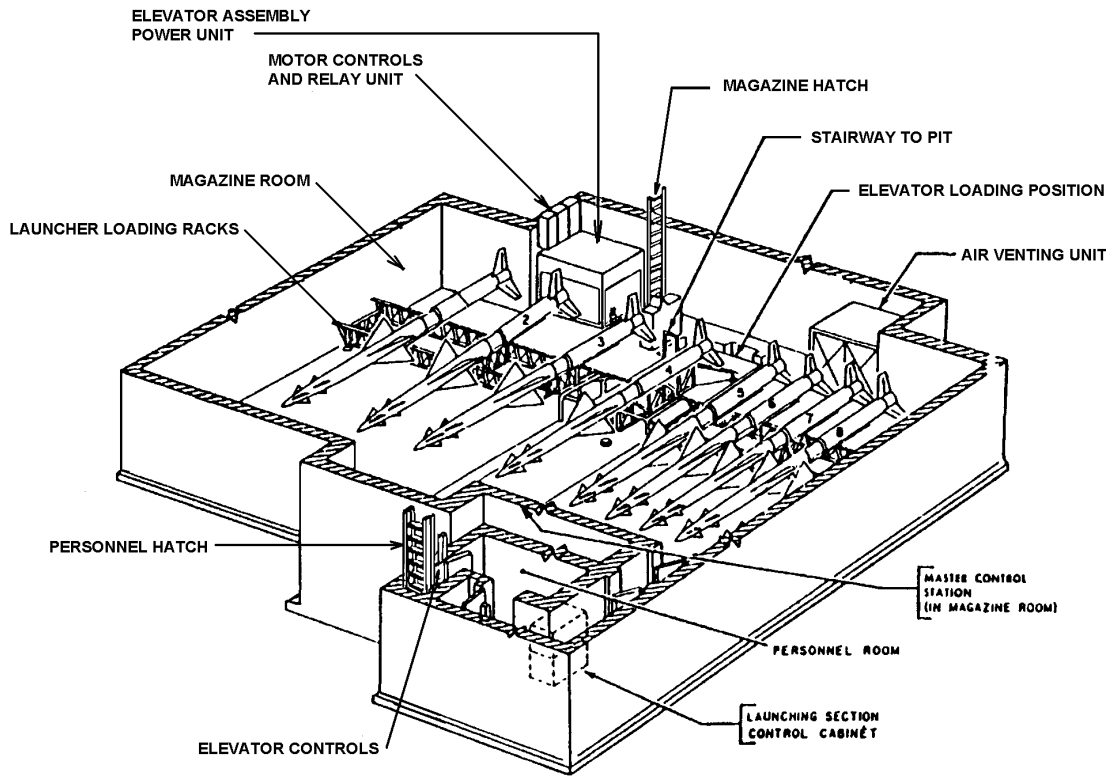


Figure 3 – Layout of a typical Nike missile storage vault and elevator system



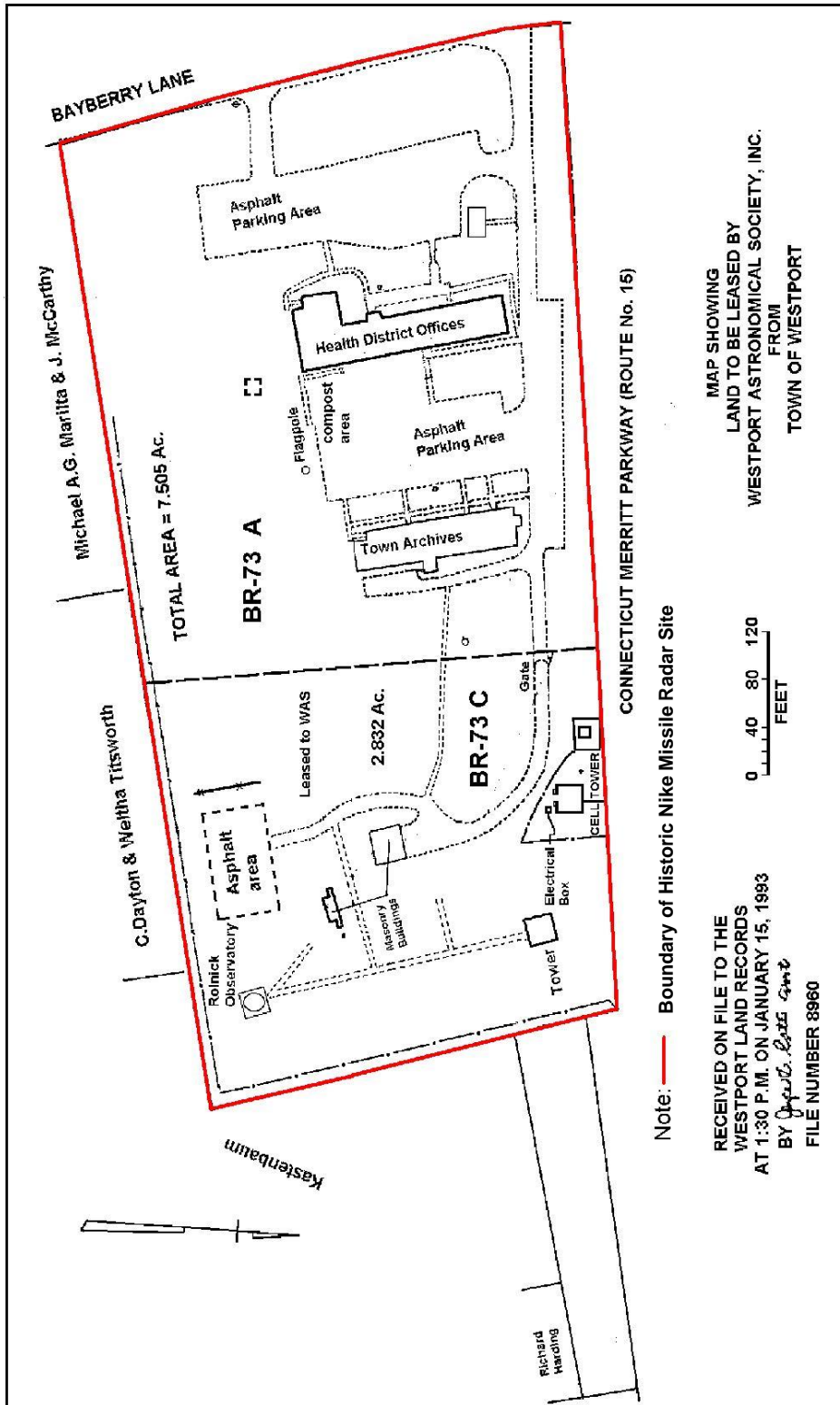


Figure 4 – The Bayberry Lane Headquarters Site (BR-72 A & C) showing original “permanent” buildings and the portion leased to the Westport Astronomical Society.



Figure 5 - View of typical Nike barracks with two- man non-com rooms at center.



Figure 6 - View of typical Nike concrete radar towers. Similar towers formed the support for the Rolnick Observatory in Westport.

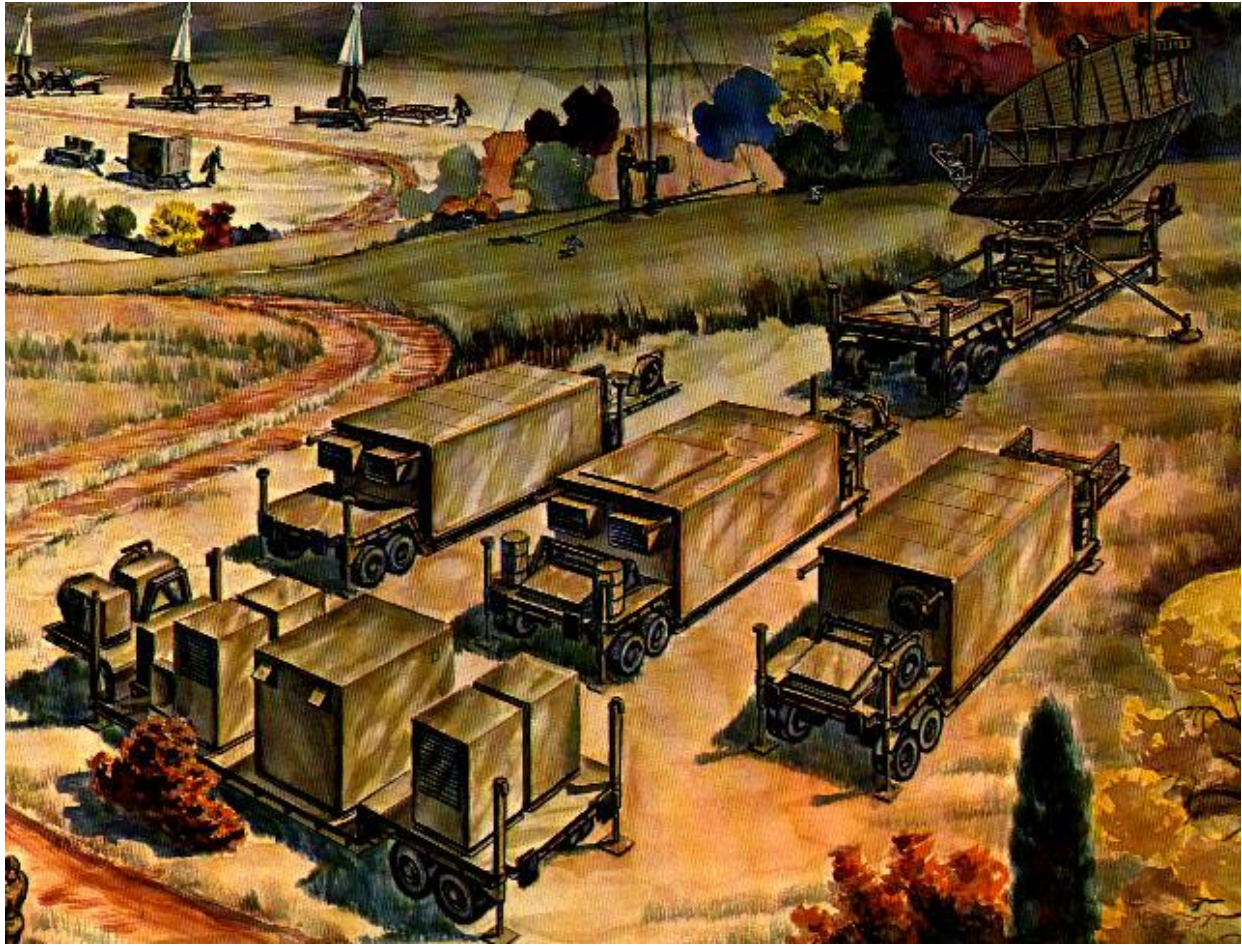


Figure 7 - Artist's conception of a Nike Installation. Note trucks which contained the electronic equipment, radar control, plotting boards and generator sets. The Launch Site is in the distance.

## Appendix A – Nike Ajax Missile Specifications

The New England Air Museum in Windsor Locks, CT has a restored Nike Ajax missile on display in its permanent collection.

### Specifications of Nike Ajax:

Length	21' (34' 10" with Booster)
Diameter	12"
Wingspan	4' 6"
Missile Fuel/Oxidizer	M3 – A combination of JP4 jet fuel and starter fuel that originally consisted of aniline/furfural alcohol, later dimethyl hydrazine. Finally, red fuming nitric acid was used (IRFNA)
Booster fuel	Solid propellant (Thiokol)
Range	25 to 30 miles
Speed	Mach 2.3 (1,679 mph)
Altitude	Up to 70,000 feet
Guidance	Command by electronic computer and radar
Warhead	Three high-explosive fragmentation warheads mounted in the nosecone, center and aft sections
Contractors	Airframe: Douglas Aircraft Propulsion Booster: Hercules Powder Company Sustainer: Bell Aircraft Company

## Comparative Specifications

Missile	Nike Ajax	<u>Nike Hercules</u>	Nike Zeus A	Nike Zeus B (XLIM-49A)	<u>Spartan (LIM-49A)</u>
<b>Length</b>	10.36 m overall 6.41 m second stage	12.53 m overall 8.18 m second stage	13.5 m	14.7 m	16.8 m
<b>Diameter</b>	0.30 m	0.80 m booster 0.53 m second stage	0.91 m	0.91 m	1.09 m
<b>Fin span</b>	1.22 m	3.50 m booster 1.88 m second stage	2.98 m	2.44 m	2.98 m
<b>Mass</b>	1,116 kg at launch 523 kg second stage	4850 kg at launch 2505 kg second stage	4980 kg	10300 kg	13100 kg
<b>Maximum speed</b>	<u>Mach 2.25</u> (ca. 3,000 km/h)	Mach 3.65 (ca. 4 4700 km/h)	Mach 4 > (ca. 4 900 km/h)		
<b>Range</b>	40 km	140 km	320 km	400 km	740 km
<b>Ceiling</b>	21,300 m	45,700 m	?	280 km	560 km
<b>First stage</b>	Solid-fuel (263 kN static thrust for 2.5 seconds)	Hercules M42 solid-fueled rocket cluster (4x M5E1 Nike boosters) 978 kN (220,000 lbf)	<u>Thiokol</u> TX-135 1,800 kN (400,000 lbf)	Thiokol TX-135 2000 kN (450,000 lbf)	Thiokol TX-500 2200 kN (500,000 lbf)
<b>Second stage</b>	Liquid-fuel (11.6 kN static thrust for 21 seconds)	Thiokol M30 solid-fueled rocket 44.4 kN (10,000 lbf)		Thiokol TX-238	Thiokol TX-454
<b>Third stage</b>	None	None	None	Thiokol TX-239	Thiokol TX-239

<b>Warhead conventional</b>	3 warheads each surrounded with 2 layers of 1/4 in (6 mm) hardened steel cubes <b>Nose:</b> M2: 4.5 lb. (2.0 kg) <u>Composition B</u> 12 lb. (5.4 kg) total <b>Mid-body:</b> M3: 92 lb. (42 kg) Comp. B, 176.8 lb. (80.2 kg) total <b>Aft:</b> M4: 59 lb. (27 kg) Comp B, 121.3 lb. (55.0 kg)	T-45 HE warhead weighed 1106 lb. (500 kg) and contained 600 lb. (272 kg) of <u>HBX-6</u> M17 blast-fragmentation	Nuclear warhead only	Nuclear warhead only	Nuclear warhead only
<b>Warhead nuclear</b>	Conventional warhead only	W-31 nuclear 2 kt (M-97) 20 kt (M-22) 40 kt (M-23)	W-31 nuclear	W-50 (400 kt) <u>thermonuclear</u>	W-71 (5 Mt) <u>thermonuclear</u>



## Appendix B – Status of Connecticut Nike Sites – 2015

With the exception of Portland site HA-36, all other Nike sites have been sold or transferred to private organizations, towns, schools, utilities, industries or individuals. Some have been retained for military use.

Location	Designation	Location	Status
Ansonia	BR-04	Airport	Forest Service Insect Laboratory
	BR-04L	Osborn Ln & Deerfield	Copper Ridge Farm
Avon/ Simsbury	HA-85C	824 Montevideo Dr.	Talcott Mtn. Science Center
	HA-85L	Hilltop Dr.	RWR Tower View Condominiums
Bridgeport	Administration		HHB/1/242d (5/59-6/63) decommissioned
Cromwell	HA-48C	County Squire Rd.	Roncelli Christ Church: Elderly House
	HA-48L	Middletown Mile Rd.	US Army Reserve Center
East Windsor and	HA-08C	Scantic Rd.	Victory Outreach Ministries Church
Warehouse Point	HA-08L	Phelps Rd.	US Army Reserve Center
Fairfield	BR-65C	One Rod Hwy.	Fairfield Fire Training Center
	BR-65L	Old Dam Rd.	South Pine Creek Park
Manchester	HA-25C	110 Garden Grove Rd.	Manchester Recreation Center
	HA-25L	Line Street	Hartford Electric Light Co.
Milford	BR-17C	Eels Hill Rd.	Milford Board of Education
	BR-17L	Rock Rd. near Quirk	Industrial Park
New Britain	Administration	Rocky Hill Rd.	Hq 63 group-decommissioned
Plainville	HA-67C	N Mountain-Loon Lake	Residential Area
	HA-67L	Hyde Rd.- Scott Swamp	Stanley Works-Garage Door Div.
Portland	HA-36C	Del Reeves Rd.	Meskomasic State Forest abandoned
	HA-36L	Clark Hill Rd.	Meskomasic State Forest abandoned
Shelton	BR-94C	Eagle Drive ext.	US Govt. storage for Ft. Devens
	BR-94L	49 Mohegan Dr.	Town of Shelton Park
West Hartford	Administration		HBB/1/192d/ (5/59-6/71)-decommissioned
Westhaven	BR-15C	March Hill	Orange ANG Communications and vehicle maintenance
	BR-15L	Bull Hill Ln.	Westhaven Nike Recreation Park
Westport	BR-73C	Bayberry Lane	Town of Westport – Offices
	BR-73L	85 North Ave.	Staples High School Grounds



## Appendix C – Geographical Data/Boundary Justification

The legal boundaries of the Operations (BR-73A/C) component of the Westport Nike Missile Radar Site have not altered since formation in the 1950s. As noted in the documentation study and illustrated on Figure 4, the parcel that supported various control functions for the Cold War defense system is intact. The parcel was identified in the original legal transfer as:

Beginning at a point on the southerly side of the Merritt Parkway in the center of Bayberry Lane; thence northeasterly along the southerly side of the Merritt Parkway 662 feet more or less to a stone wall at land of the State of Connecticut; thence by said land of the State of Connecticut along stone walls southeasterly 123 feet more or less and northeasterly 213 feet more or less to a point; then South 30° 00' East through land of owner South 64°00' West 835 feet more or less to the center of Bayberry Lane; thence northwesterly by the center of Bayberry Lane 445 feet more or less to the point of the beginning. Containing 7.35 acres more or less.

Confirmation of the original boundaries was noted on Map 8930 located in the Westport Land Records. This map defines land leased by the Westport Astronomical Society, Inc.

The UTM Coordinates were acquired by the author from a U.S. Geological Survey Map of Westport, Connecticut, Zone 18, revised in 1971. The UTM location for the Operations site (BR-73A/C) is zone 18 640100 E - 4558900 N. Google Earth locates the Operations site 41°09' 43.64" N and 72° 19' 51.06" W at an elevation of 228 feet. [The associated Missile Launch Site – located off of North Avenue and completely dismantled - has coordinates 18 640000 E – 4554750 N.]

## PHOTO INDEX – BR-73 C – Nike Headquarters Site

### 182 Bayberry Lane – Westport, Connecticut

Photographed by Robert Stewart

September 29, 2015

1. (ID-14572) Historic Aerial View of BR-73C Nike Headquarters Site – Westport, CT – c. 1974-1979
2. (ID-0455) View East of BR-73 Nike Hq, Barracks, Offices & BOQ. Presently Westport-Weston Health District Offices
3. (ID-0453) View northeast of BR-73 Nike Hq Barracks, Offices & BOQ. Presently Westport-Weston Health District Offices
4. (ID-0450) View southeast of BR-73 Nike Mess Hall, Kitchen & Recreation Building. Presently Public Works facility and Westport archival storage.
5. (ID-0446) View northwest of BR-73 Nike Mess Hall, Kitchen & Recreation Building. Presently Public Works facility and Westport archival storage. Town composting area at left of photo.
6. (ID-0444) View southeast of BR-73 former Nike Radar tower. Repurposed as telescope tower for the Westport Astronomical Society observatory
7. (ID-0434) The 12½ Newtonian reflector at the Rolnick Observatory
8. (ID-0428) View inside the observatory tower. The concrete cylinder was the original support for the radar antenna. The steel, corrugated sheet metal and wooden stairway were added. By the Westport Astronomical Society.
9. (ID-0438) View west from top of tower. The flat area at left may have been used as a parade ground and recreational field. The small building at the right may have housed generators.
10. (ID-430) View northwest from tower of former BR-73 communications & control center. Currently offices of the Westport Astronomical Society.
11. (ID-0412) View northwest of former BR-73 communications & control center. Currently offices of the Westport Astronomical Society.
12. (ID-0414) View north of former BR-73 north radar tower. Proposed to be antenna tower for the Westport Astronomical Society's Amateur Radio Club – station KB1WLW.

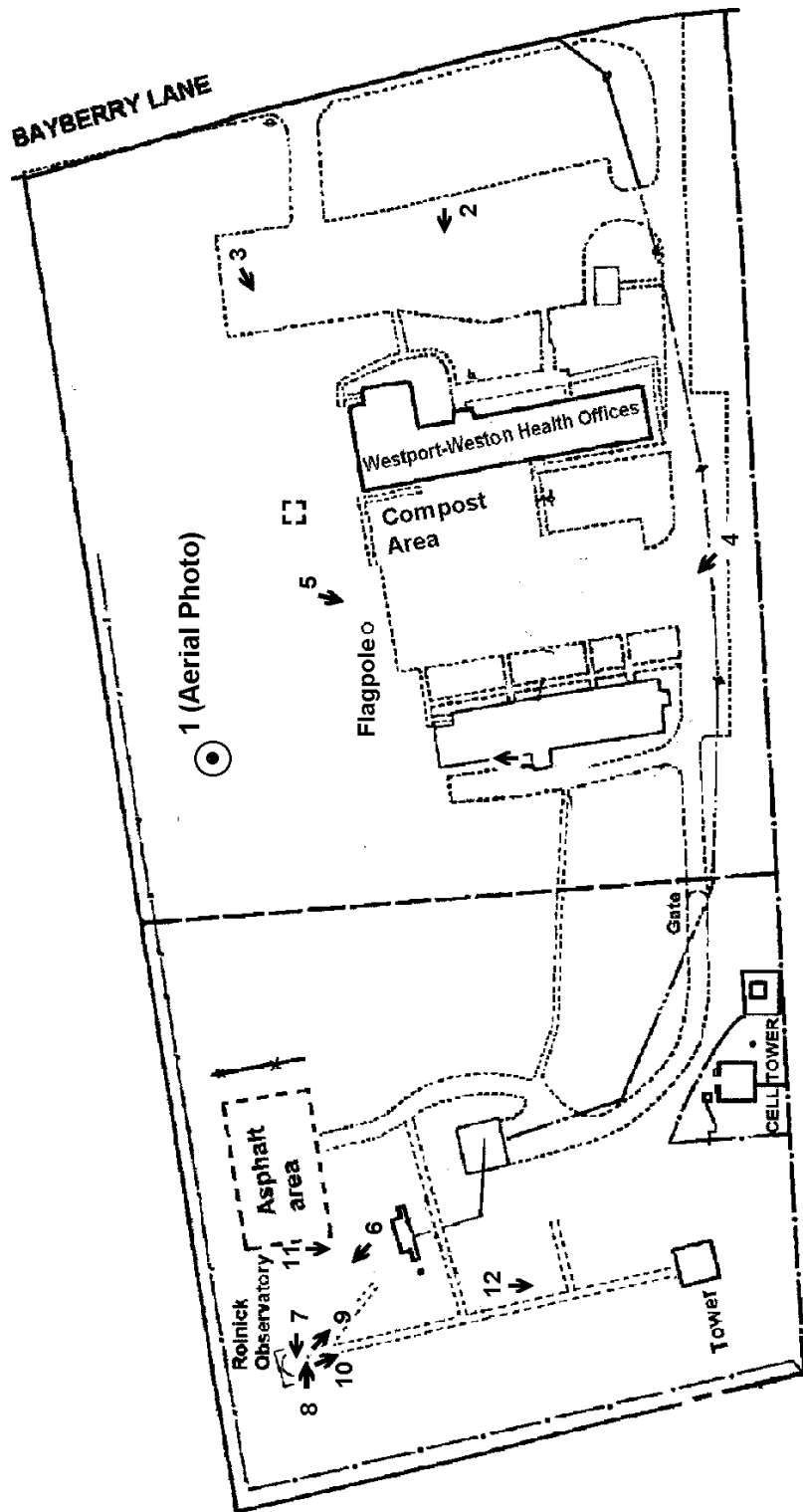


Photo Key for Nike Missile Site BR-73 C

BR-73 C - Nike Missile Site Photo Key      Note: Photo 1 is a Historic Aerial View taken directly over the site.



1. (ID-14572) Historic Aerial View of BR-73C Nike Headquarters Site – Westport, CT – c. 1974-1979



2. (ID-0455) View East of BR-73 Nike Hq, Barracks, Offices & BOQ. Presently Westport-Weston Health District Offices





3. (ID-0453) View northeast of BR-73 Nike Hq Barracks, Offices & BOQ. Presently Westport-Weston Health District Offices



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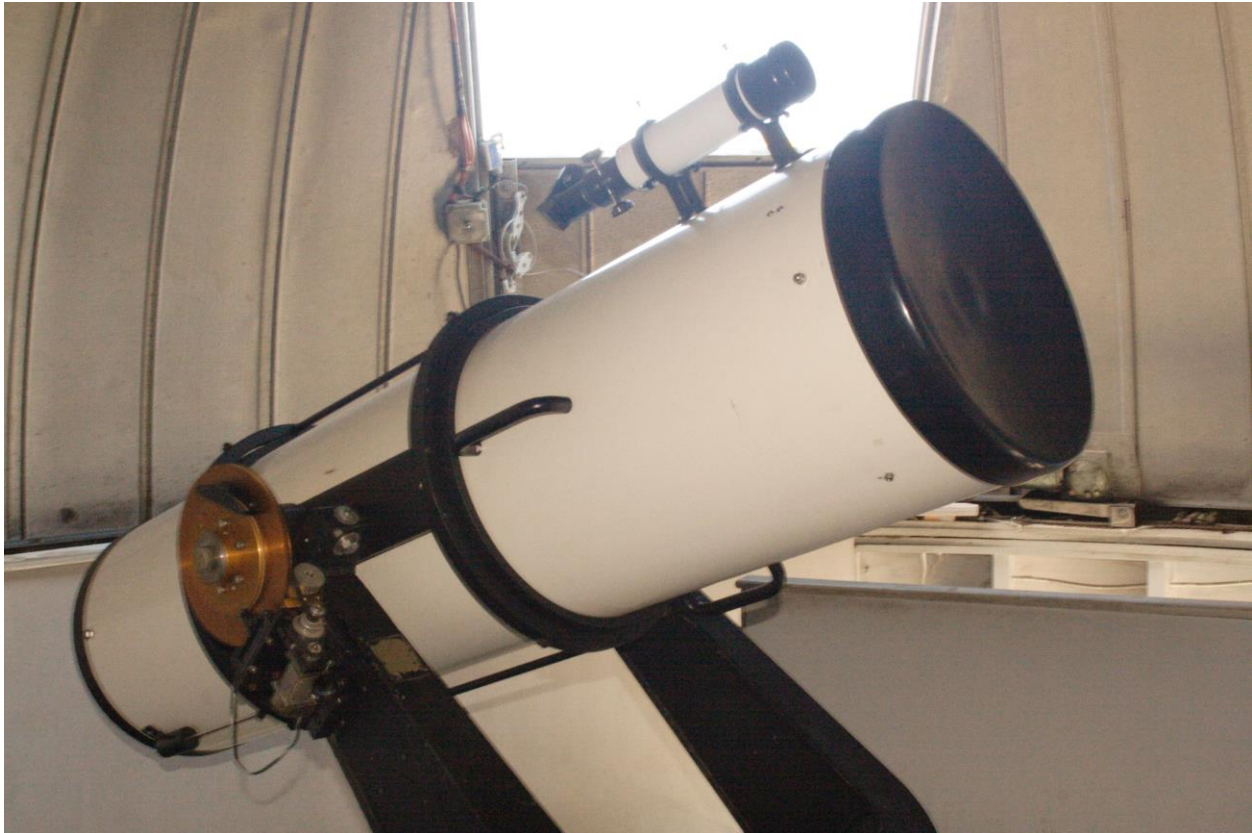


5. (ID-0446) View northwest of BR-73 Nike Mess Hall, Kitchen & Recreation Building. Presently Public Works facility and Westport archival storage. Town composting area at left of photo.

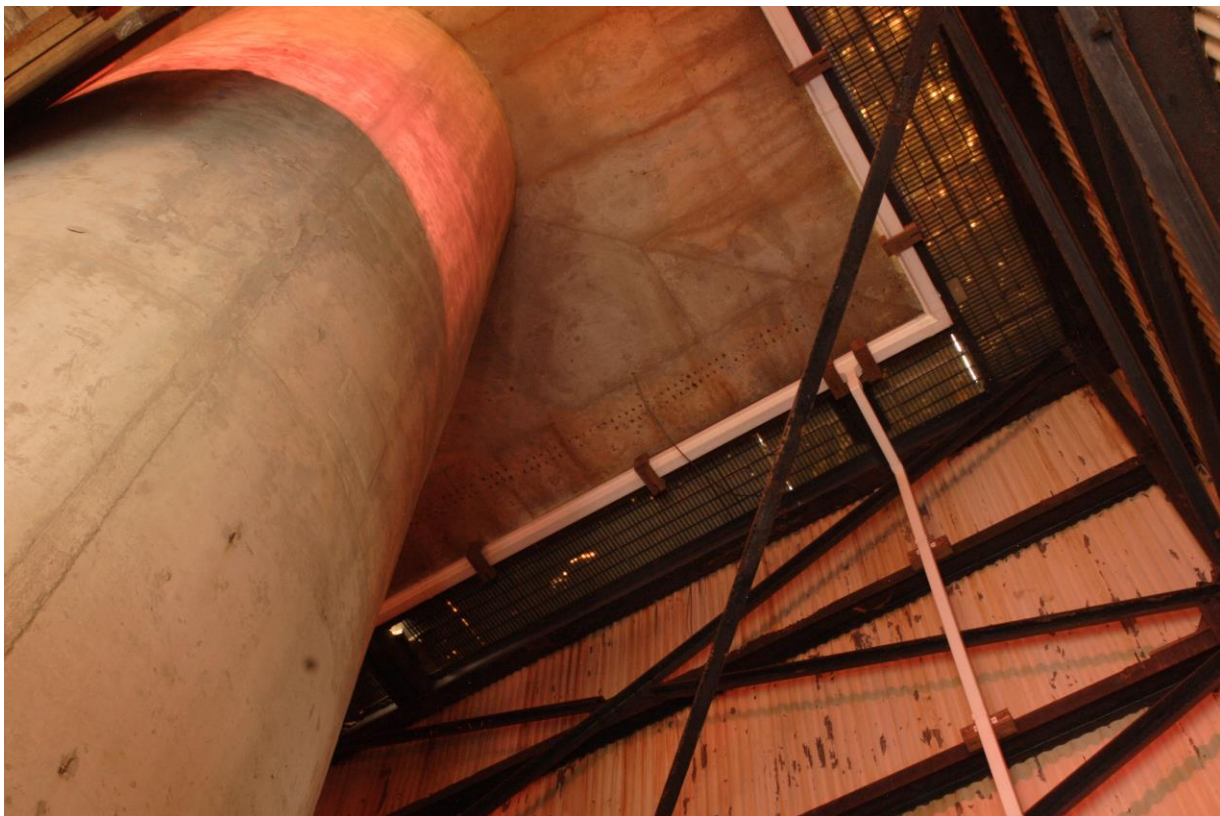


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## HISTORIC RESOURCES INVENTORY - BUILDING AND STRUCTURES

**Please send completed form to:** Stacey Vairo, National Register and State Register Coordinator,  
Connecticut Commission on Culture & Tourism, One Constitution Plaza, 2nd Floor, Hartford, CT 06103

**\* Note:** Please attach any additional or expanded information on a separate sheet.

**GENERAL INFORMATION**

Building Name (Common) \_\_\_\_\_  
 Building Name (Historic) \_\_\_\_\_  
 Street Address or Location \_\_\_\_\_  
 Town/City \_\_\_\_\_ Village \_\_\_\_\_ County \_\_\_\_\_  
 Owner(s) \_\_\_\_\_  Public  Private

**PROPERTY INFORMATION**

Present Use: \_\_\_\_\_  
 Historic Use: \_\_\_\_\_

**Accessibility to public:** Exterior visible from public road?  Yes  No  
 Interior accessible?  Yes  No If yes, explain \_\_\_\_\_  
 Style of building \_\_\_\_\_ Date of Construction \_\_\_\_\_

**Material(s)** (Indicate use or location when appropriate):

Clapboard  Asbestos Siding  Brick  Wood Shingle  Asphalt Siding  
 Fieldstone  Board & Batten  Stucco  Cobblestone  Aluminum Siding  
 Concrete (Type \_\_\_\_\_)  Cut Stone (Type \_\_\_\_\_)  Other \_\_\_\_\_

**Structural System**

Wood Frame  Post & Beam  Balloon  Load bearing masonry  Structural iron or steel  
 Other \_\_\_\_\_

**Roof** (Type)

Gable  Flat  Mansard  Monitor  Sawtooth  
 Gambrel  Shed  Hip  Round  Other \_\_\_\_\_

(Material)

Wood Shingle  Roll Asphalt  Tin  Slate  Asphalt Shingle  
 Built up  Tile  Other \_\_\_\_\_

**Number of Stories:** \_\_\_\_\_ **Approximate Dimensions** \_\_\_\_\_

**Structural Condition:**  Excellent  Good  Fair  Deteriorated

**Exterior Condition:**  Excellent  Good  Fair  Deteriorated

**Location Integrity:**  On original site  Moved When? \_\_\_\_\_

**Alterations?**  Yes  No If yes, explain: \_\_\_\_\_

**FOR OFFICE USE:** Town # \_\_\_\_\_ Site # \_\_\_\_\_ UTM \_\_\_\_\_

District:  S  NR If NR, Specify:  Actual  Potential

**PROPERTY INFORMATION (CONT'D)**

**Related outbuildings or landscape features:**

- Barn       Shed       Garage       Carriage House       Shop       Garden
- Other landscape features or buildings: \_\_\_\_\_

**Surrounding Environment:**

- Open land     Woodland     Residential     Commercial     Industrial     Rural
- High building density       Scattered buildings visible from site

- Interrelationship of building and surroundings:
  
- Other notable features of building or site (*Interior and/or Exterior*)

Architect \_\_\_\_\_ Builder \_\_\_\_\_

- Historical or Architectural importance:

- Sources:

Photographer \_\_\_\_\_ Date \_\_\_\_\_

View \_\_\_\_\_ Negative on File \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

- Subsequent field evaluations:

**Threats to the building or site:**

- None known       Highways       Vandalism       Developers       Renewal       Private
- Deterioration       Zoning       Other \_\_\_\_\_       Explanation \_\_\_\_\_

CONTINUATION SHEET

Item Number: \_\_\_\_\_ Date: 1/31/16  
182 Bayberry Lane, Westport, CT

• **Interrelationship of building and surroundings:**

The 7.35-acre site runs parallel to the Merritt Parkway and is entered only off Bayberry Lane. The access to the rear of the lot runs along the extreme north edge of the parcel, adjacent to state lands. Two radar towers were sited at the highest elevation at the extreme eastern end of the lot and are surrounded by mature trees; two small radar-associated buildings are close to the towers. The original barracks, running parallel to Bayberry Lane, are separated from the Lane by a parking lot, trees, shrubs, and a slight rise in topography. The original mess hall/recreation room is sited between the barracks and the towers and runs perpendicular to the access lane.

• **Other notable features of building or site (*Interior and/or Exterior*):**

One radar tower, the more southerly metal structure, has been transformed into an astrological observatory. The second radar tower has not been altered to any great degree since decommissioning.

The entire Westport Nike Missile operations complex, BR-73A and BR-73C, was constructed according to strict US Army guidelines that demanded uniformity in scale, size, orientation, design, and materials. It is a rare, remarkably intact survivor.

• **Historical or Architectural importance:**

There were no victory parades or medals for veterans of the Cold War period who gave honest and faithful service as peacekeepers who were willing to serve their country. In 1955 the country faced a belligerent USSR and other formidable enemies. The Soviets had 175 divisions facing 21 NATO divisions. There was a credible threat of Soviet bombers attacking the industrialized cities of the United States. Strategic defense called for watchfulness and devotion to duty. There were no medals of recognition for the troops who had to be on guard against surprise attack.

With the development of Intercontinental Ballistic Missiles capable of carrying nuclear warheads Nike became obsolete but for a decade it countered the threat of air attacks. Nearly all of the former Nike sites have been repurposed for civilian use. Some house vastly different military installations, others are parks or school grounds. Yet there are few commemorative signs that describe the significant function those sites were tasked with during the dark days of the Cold War years. Their service is often dismissed as "peacetime." This was an altered kind of service, a unique war, and it deserves recognition. The Cold War was an exceptional period in our history. It marked a period in technological advancement that led to the development of computers and enabled the exploration of space. The Nike sites deserve registration as historic places in Westport and Connecticut history.



STATE OF CONNECTICUT

COMMISSION ON CULTURE & TOURISM  
STATE HISTORIC PRESERVATION OFFICE  
One Constitution Plaza, Second Floor, Hartford, CT 06103

HISTORIC RESOURCE INVENTORY FORM  
For Buildings and Structures

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182 Bayberry Lane, Westport, CT

• **Sources:**

**Web Sites:**

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Guide-United States Nuclear Missiles: <http://www.fas.org/nuke/guide/usa/airdef/Nike-ajax.htm>

Comprehensive Technical and Personnel Information on the Nike Project:  
<http://ed-thelen.org/> (A useful web site for contacting former NIKE personnel).

Historic American Engineering Record reports: <http://memory.loc.gov/cgi-bin/ampage>

National Park Service Web Site for Nike Base SF-88L: [www.nps.gov/goga/nike-missile-site.htm](http://www.nps.gov/goga/nike-missile-site.htm)

Nike Sites of Connecticut: [http://coldwar-ct.com/Nike\\_Sites.html](http://coldwar-ct.com/Nike_Sites.html). Note: This website has additional photographs and interviews with former Nike personnel.

<http://www.was.ct.org> This is the website of the Westport Astronomical Society

**Reports:**

HABS Recordation of NIKE Missile Battery PR-79, East Windsor Road south of State Route 101, Foster, Providence County, RI

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View East of BR-73A Nike Headquarters, Barracks, Offices & BOQ. Presently, Westport-Weston Health District Offices.



View southeast of BR-73A Nike Mess Hall, Kitchen and Recreation Building. Presently, Public Works facility and Westport archival storage.

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View southeast of BR-73C former Nike Missile Radar tower. Repurposed as telescope tower for the Westport Astronomical Society observatory