Donald Lee Marsh  
Remembering Upshur County's Cold War Casualty

—Michael S. Donovan

On May 22, 1958, disaster struck the launch area of Nike Ajax site NY-53 in Middletown, New Jersey, operated by the U.S. Army's Battery B, 526th Antiaircraft Artillery [AAA] Missile Battalion. On that day, 14 of the battery's 36 Nike Ajax missiles were above ground amongst the site's three launching sections for routine maintenance and scheduled modifications. However, one of these missiles exploded which led to another seven missiles either launching or exploding; ten men were killed, including nineteen-year-old Upshur County native Donald Lee Marsh. Fifty years later during a modest ceremony at the nearby Sandy Hook that marked the 50th anniversary of the explosions, a woman in attendance introduced herself as Donald Marsh's girlfriend from May 1958.

The Nike Ajax

The Nike Ajax missiles deployed in Middletown were the direct result of a January 1945 decision by the U.S. Army for the development of an antiaircraft guided missile system, which led to the creation of Project Nike in February 1945. To the United States, the perceived post-World War II [WWII] threat consisted of long-range Soviet bombers carrying nuclear weapons attacking the country's mainland. However, the inability of existing conventional anti-aircraft guns to effectively engage this threat necessitated the development of a new weapon system. The Army called for a weapon system with a lateral range of 60,000 feet that could target a WWII B-29 type bomber traveling at 600-miles per hour and flying at altitudes between 20,000 and 60,000 feet (Cagle 3-4).

The Army's efforts were realized in March 1954 with the tactical deployment of the Nike Ajax antiaircraft battalion at Fort Meade, Maryland, the first of a group of Nike sites that defended the area of Baltimore and Washington, DC. The Nike Ajax was the world's first operational surface-to-air guided missile system. The Army fielded this missile system throughout the world at fixed sites to defend key military installations, vital industrial areas, and major urban areas.

These Nike Ajax missiles, when deployed in the United States, were under the command and control of the United States Army Air Defense Command [USARADCOM], created on March 21, 1957, with headquarters at Ent Air Force Base, in Colorado Springs, Colorado. USARADCOM, subordinate to the Continental Air Defense Command [CONAD], had the mission to develop an air defense system strong enough to deter a potential aggressor from attacking by air and failing this, destroy the attacking aircraft before they could drop their bombs against specific defended areas (Young 83). While USARADCOM provided air defense with missiles fired from the ground at targets not more than 100 miles away, the U.S. Air Force provided CONAD the capability for interceptor aircraft, area defense, and missiles with ranges beyond 100 miles, while the U.S. Navy defended the nation's sea approaches (Powers 53).

While a typical Nike missile battery consisted of three areas - the administrative area, the integrated fire control [IFC] area, and the launch area — there was no typical design layout for a Nike site since local factors dictated the final configuration. With the battery's administrative area usually co-located with either the IFC or the launch area, the administrative area consisted of nonoperational facilities such as barracks, a mess hall, and other buildings for administration, supply, and maintenance. The battery's missiles were stored, maintained, and readied for launch at the launch area while the IFC contained the radars used to acquire the incoming target and control the outgoing missile. Operational requirements of the Nike system required that the IFC and launch area be within visual sight of each other but separated by a distance of between 1,000 and 6,000 yards.
NY-53

While not a map, this graphic uses a star to depict the location of Middletown within the state of New Jersey (“Town Maps USA”).

Like other Nike sites, NY-53’s launcher area was deployed on land acquired from local landowners, requiring a significant amount of site preparation and construction. Depending upon the local geographical area, a Nike launch area was between 15 and 35 acres in size while the IFC averaged approximately six acres in size (“For All Commanders and Troops” 3). The process of land acquisition for NY-53 began in February 1955 with the Army obtaining a total of 80.99 acres: 4.55 acres for the IFC; 18.16 acres for the launcher area; and 58.28 acres for casemates around and between the IFC and launch area. With the construction of NY-53 complete, Battery B, 526th AAA Missile Battalion occupied NY-53 in May 1957 (Executive Officer, “DA Form 1 Morning Report”).

As with many Nike Ajax batteries, NY-53 consisted of 12 missile launchers, with four launchers in each of three launching sections: Section A, Section B, and Section C. A launching section’s missiles were stored in an underground storage area, referred to as a magazine, and transported up to the launcher first by an elevator and then manually pushed into position on a rail system. The launcher configuration at NY-53 consisted of three launching sections each with four launchers for a total of 12 launchers. In the case of NY-53, its complement of 36 missiles were allocated three per launcher.

This photo shows a single Nike Launcher Section of four launchers at the former Fort Cronkhite; NY-53 consisted of three similar launcher sections. Now a part of Golden Gate National Recreation Area, Fort Cronkhite was a former World War II training post that later housed a Nike battery that defended San Francisco. (Photograph courtesy of the National Park Service)

Donald Lee Marsh

Donald Lee Marsh was born on December 29, 1938, to parents Paul Evert Marsh and Violet Mae Bosley in the unincorporated community of Alton. Little is known about his mother, who was 14 years old at the time of Donald’s birth (Hospital).

Donald was raised by his paternal grandparents, Mr. and Mrs. Oyd Marsh, also of Alton, and attended the two-room Alton Elementary School, located a short walk from his grandparents’ house. He attended the Tennerton division of Buckhannon-Upshur High School for approximately two years before enlisting in the Army on January 10, 1956, for a three year term (“Upshur Soldier Is Killed in Nike-Ajax Explosion”). Marsh is listed as an unpictured freshman in the school’s 1954 yearbook (Yearbook Staff 65).

After entering the Army, the 17-year-old Marsh completed basic training with the 506th Airborne Infantry5 at Fort Jackson, South Carolina; anti-aircraft artillery and guided missile school at Fort Bliss, Texas; and signal school training at Fort Gordon, Georgia (“Upshur Soldier Is Killed in Nike-Ajax Explosion”).

Donald Marsh in Boot Camp. This photograph was most likely taken during Marsh’s basic training (also referred to as boot camp), as evidence by the lack of unit and personal insignia on his duty uniform; the boot camp photograph is traditionally taken near the beginning of basic training. Marsh’s photo reflects the typical reaction of many basic trainees; no doubt he is wondering why he had volunteered for the shocking and new experience of the Army. (Photograph courtesy of Billy Gale Marsh)

Conversely, this photo shows a smiling Marsh in his dress uniform. The absence of rank insignia indicates he is a Private, the lowest rank of an enlisted soldier in the Army. As evident by the wide smile in contrast to the boot camp photograph, this photo was most likely taken shortly before his graduation from anti-aircraft artillery and guided missile school at Fort Bliss, Texas; he is visibly happy relative to his boot camp photograph. The stark differences in facial expressions between these two photographs is not uncommon for those who have entered the military. (Photograph courtesy of Billy Gale Marsh)

A partial review of Army Morning Reports5 provides a glimpse into Marshal’s Army experience. PVT 2 Marsh reported for duty on August 25, 1956, to Battery D, 737th AAA Missile Battalion7 at Fort Tilden in New York, upon completing signal school at Fort Gordon (Simms, “DA Form 1 Morning Report”). On April 15, 1957, PFC Marsh departed NY-53 for 15 days of leave10 (Simms, “DA Form 1 Morning Report”); he was scheduled to return on April 29th. After failing to return as scheduled, Marsh was reported as absent without leave (AWOL) on April 30th (Executive Officer, “DA Form 1 Morning Report”); he finally returned to NY-53 on May 8th (Executive Officer, “DA Form 1 Morning Report”). On June
of Launching Section A. Contemporary newspaper reporting, particularly in northern New Jersey, contained photographs of resulting missile debris in local residential areas. Windows were blown out of houses for miles around while the sound of the blast was heard at a distance of fifteen miles (Cagle 194).

Of the 11 men working above ground in Launching Section A, ten were killed, including Donald Marsh. Ordnance Corps civilian Joseph A. Pollino survived due to a crouching movement he made immediately prior to the explosions (Egan 4).

While the seven missiles located above ground in Launching Section A either exploded or launched, the nearest adjoining missile in Launching Section B fortunately did not explode; however, its booster was ignited by debris, resulting in the flight of the missile and its subsequent impact into the side of a nearby hill; failure of this missile to explode may have saved the other six missiles that remained aboveground (Cagle 195).

The Explosions

It was a sunny Thursday afternoon in Middletown on May 22, 1958 (Cagle 194) when 14 of NY-53’s 36 missiles were located above ground: seven in Launching Section A, four in Launching Section B, and three in Launching Section C. At this time, three separate events were underway in the vicinity of Launching Section A. Battery personnel were checking missiles in preparation for going on a higher state of alert; known as a command calibration, this operation was performed routinely at least once a week (Permanent Subcommittee on Investigations 16). Three soldiers were performing this task in Launching Section A (Egan 4). Separately, a team of two Ordnance Corps civilians were repairing Launcher Number 3 in Launching Section A; this launcher did not hold a missile (Permanent Subcommittee on Investigations 16). Finally, another Ordnance team of three civilians were conducting an authorized field modification of the battery’s missiles; this modification had been previously performed on approximately 1,000 missiles throughout the country (Permanent Subcommittee on Investigations 16).

This field modification consisted of replacing the missile’s arming mechanism, a process requiring the removal of both the nose and the center warheads from the missile (Cagle 195). The pace of the Ordnance team conducting this modification was set at four missiles per day; the team had completed the modification on three missiles and was working on its fourth missile of the day (Lewis 18). Three soldiers were assisting with this task in Launching Section A (Egan 4). Besides the 11 men previously mentioned who were working aboveground in Launching Section A, seven other men were also present in the launcher area: three soldiers were above ground at Launching Section C, two soldiers were below ground at Launching Section B, and two soldiers were below ground at Launching Section A (Egan 3-4).

Somewhere during the process of conducting the modification on the fourth missile, the missile exploded which in turn resulted in the nearly simultaneous detonation of the remaining six missiles of Launching Section A. Contemporary newspaper reporting, particularly in northern New Jersey, contained photographs of resulting missile debris in local residential areas. Windows were blown out of houses for miles around while the sound of the blast was heard at a distance of fifteen miles (Cagle 194).

Of the 11 men working above ground in Launching Section A, ten were killed, including Donald Marsh. Ordnance Corps civilian Joseph A. Pollino survived due to a crouching movement he made immediately prior to the explosions (Egan 4).

While the seven missiles located above ground in Launching Section A either exploded or launched, the nearest adjoining missile in Launching Section B fortunately did not explode; however, its booster was ignited by debris, resulting in the flight of the missile and its subsequent impact into the side of a nearby hill; failure of this missile to explode may have saved the other six missiles that remained aboveground (Cagle 195).

Post-Blast Scene of NY-53 (Stackpole) This photograph shows the launcher site after the explosions; Launching Section A is seen in the center foreground while the front end of a destroyed vehicle is seen in the left foreground. Launching Section B is adjacent to Launching Section A while Launching Section C is seen in the background of the photograph.

The Aftermath

As the Nike system was in development and later during its fielding, the Army conducted a significant marketing plan, carefully explaining the missiles were virtually accident proof while a missile battery “was no more dangerous a neighbor than a gas station” (“Army Forces: Death in the Neighborhood”). An article in the June 2, 1958, edition of Time Magazine summed up the angst surrounding the Nike program in the aftermath of NY-53’s deadly explosions: “Last week the gas-station blew up” (“Army Forces: Death in the Neighborhood”).

The explosions at NY-53 damaged Launching Section A, destroyed eight missiles, and damaged two more missiles. More significantly, the explosions killed 10 Army personnel: six enlisted soldiers and four Civilian Ordnance Corps workers. An additional three men suffered serious but non-fatal injuries. Another soldier was under the site of the explosions in the underground missile storage...
location and suffered from shock and hysteria; all four men were transported for treatment at Patterson Army Hospital, located at nearby Fort Monmouth. Newly dedicated on April 24, 1958, the 100-bed Patterson Army Hospital (Office of Medical History) also received the bodies of the ten men who died.

On Thursday evening Paul Marsh received initial notification of his son's status, learning Donald was on duty at the time of the explosions but was considered missing since the Army was unable to identify his remains; this telephonic notification was made by the base commander ("Upshur Soldier Is Killed in Nike-Ajax Explosion"), most likely a reference to First Lieutenant Robert F. Daly, the commander of Battery B and Marsh's commanding officer. The Morning Report for that day listed all six soldiers as "missing due to accident this station" (Daly, "DA Form 1 Morning Report").

Initial casualty figures varied, as published in newspaper articles throughout the country the next day, from between seven dead with three missing to nine dead with one missing. These initial varying reports were most likely due to the effects of the explosions; newspaper articles of the time cited the grim scene, some in graphic detail, encountered by response personnel. Newspaper coverage of the explosions in the United States ranged from Boston to Los Angeles and numerous points in between. Indeed, the coverage spanned the globe with reporting published in The London Times and international editions of Stars and Stripes.

The next morning – Friday, the 23rd of May – the elder Marsh received a telegram at his home in Hinkleville that verified the information provided in the telephone conversation of the previous night; at this point the family postponed funeral arrangements pending conclusive news on Donald's body ("Upshur Soldier Is Killed in Nike-Ajax Explosion"). With Friday's Morning Report, however, Marsh's status was changed from missing to "death from accidental injury" (Daly, "DA Form 1 Morning Report").

Paul Marsh received another telegram on Saturday morning providing the definitive notice of Donald Marsh's death and indicated a follow-on letter would provide further detail ("Upshur Soldier Is Killed in Nike-Ajax Explosion"). This letter is most likely a reference to the commander's letter of sympathy that is customarily written to the family of a deceased soldier.

Absent any evidence of gross carelessness, smoking, inattention to the operations, or any other possible cause such as sabotage, the Army's investigation into the explosions concluded the most probable cause of the explosion was the crushing or rupturing of a detonating cap (Permanent Subcommittee on Investigations 16). Unstated in the Army's report of early July 1958 was an explanation of what caused the crushing or rupturing of a detonating cap, which is the explosive element used to initiate the detonation of an Ajax warhead.

Donald Marsh was laid to rest on Friday, May 30, 1958, eight days after his death, at Indian Camp Cemetery upon the conclusion of funeral services that began at 10 in the morning at the Alton Evangelical United Brethren Church; the Reverend Glen Black officiated and the Alexander Post of the American Legion conducted graveside rites ("Missile Victim Buried Friday"). Marsh's final resting place is a 2.7 mile ride by car from the house of his grandparents. Tragically, he had planned to return home that weekend in May to attend the annual Strawberry Festival ("Upshur Soldier Is Killed in Nike-Ajax Explosion").

For reasons presently unknown, Paul Marsh did not apply for Donald's government-provided headstone until September 28, 1959, 16 months after Donald's burial. The Georgia Marble Company shipped the stone in late October to Adrian; the Tadsworth Brothers Funeral Home of French Creek ultimately transported the stone to Indian Camp Cemetery (Marsh).

Headstone of Donald Lee Marsh, 2015 (Photograph courtesy of the author)

As NY-53 was rapidly repaired and continued with its mission, the victims of the explosions were memorialized in a monument installed in close proximity to the site of the explosions. Privately commissioned and paid for by the men who worked with the victims (Biddinger 4), the monument was flanked by two missiles crafted in stone. These missiles were crafted by a stonemason who worked at Fort Wadsworth, New York, with the four civilians killed at NY-53 (Biddinger 4).

Memorial Dedication at NY-53's Launcher Area (U.S. Army photograph courtesy of the National Park Service)

Rededication Ceremony at Highlands Air Force Station, circa 1963 (U.S. Army photograph courtesy of the National Park Service). Upon the closure of the NY-53 in 1963, the monument was relocated to the nearby Highlands Air Force Station (AFS) in Highlands, New Jersey. Shown is a civilian who survived the explosions participating in the rededication ceremony (Hoffman, "Donald Marsh"); this is Ordnance Corps civilian Joseph A. Follino.
As the Soviet nuclear threat evolved from bombers to intercontinental ballistic missiles (ICBM), the Nike air defense system became obsolete since it could not counter the high flying ICBM threat. With the closing of the national Nike system as well as the deactivation of Highlands AFS in 1974, the NY-53 monument was moved to Sandy Hook and incorporated into the August 15, 1974, inactivation ceremony of the air defense units at Fort Hancock, New Jersey. One element of the inactivation ceremony was the dedication of Guardian Park. Guardian Park, the last monument added to Fort Hancock by the U.S. Army, is named for the Nike air defense missiles as the last guardians of the New York Metropolitan Area (Biddinger 1).

Notes
1 During its operation, NY-53 was also referred to as Belford, Leonardo, and Chapel Hill. This article will use the more common reference of Middletown.
2 Named for the winged Greek goddess of victory, there were three planned missiles within the Nike family: Ajax, Hercules, and Zeus. The conventionally-armed Ajax was followed by the nuclear-armed Hercules while the Zeus (designed to defend against intercontinental ballistic missiles) was neither produced nor fielded.
3 The combined area of Baltimore and Washington, DC was referred to as a defense area. Each of the 40 defense areas within the Continental United States consisted of a series of Nike sites that encircled the defended area.
4 The Spring 2002 edition of The Upshur County Historical Society Newsletter contains an article on Alton.
5 Originally designated the 506th Parachute Infantry Regiment in 1942, this is the regiment whose Company E was featured in the 2001 HBO miniseries Band of Brothers.
6 A cropped version of this photograph appeared in an article reporting Marsh’s death in the May 28, 1958, edition of The Republican-Delta.
7 There are nine enlisted pay grades in the U.S. Army, referred to as E-1 through E-9. A Private, abbreviated as PVT, is an E-1. An E-2 is also a Private, but is abbreviated as PVT. A private First Class, abbreviated as PFC, is an E-3; this is the rank Marsh held at his death.
8 Army Morning Reports detailed the daily activity of an army unit during both war and peace; the report communicates information on unit personnel, activities, and locations. Unlike operational records that focused on larger units, the morning report detailed activity at an individual company, or in the case of NY-53, an individual battery. Army Morning Reports dated 1912 through 1959 are accessible to the public through the National Archives at the National Personnel Records Center in St Louis. Army Morning Reports dated between 1960 and 1974 are not archived and must be accessed through a written request to the National Personnel Records Center.
9 This unit was redesignated as Battery B, 526th AAA Missile Battalion on April 1, 1957, prior to its May 1957 relocation to Middletown, New Jersey.

10 Leave is the military term for vacation in which a military member’s supervisor approves the request for leave and the individual must return to the appointed place of duty no later than the designated date and time, usually one minute before midnight.

11 Unfortunately, the readily available records do not reveal the nature of Marsh’s offense.

12 This phenomenon, the detonation of an explosive item that causes the detonation of a nearby explosive item, is referred to as sympathetic detonation.

13 Marsh’s death certificate, issued by the State of New Jersey, indicates his death occurred at 1:10 PM and that he was declared dead upon arrival at Patterson Army Hospital. An article in The Republican-Delta indicated the explosions occurred at 1:30 PM.

14 Two of the soldiers killed (Walter E. Berry and Jerome W. Mould) were buried on May 28, 1958, in a common grave at Beverly National Cemetery in Beverly, New Jersey.

15 Founded in 1861, the newspaper Stars and Stripes reports on issues affecting U.S. armed forces personnel. Editorialy, the paper is separate from its operation within the Department of Defense.

16 This American Legion Post is no longer active.

17 Donald’s father died in 1961 in Columbus, Ohio, and was laid to rest next to him in Indian Camp Cemetery.

18 Sandy Hook is a unit of the Gateway National Recreation Area, administered by the National Park Service.

19 At the ceremony, the woman provided her contact information to a member of the park staff. Unfortunately, her contact information was lost amongst the destruction at Sandy Hook caused by Hurricane Sandy in October 2012.

Michael Donovan lives in Fairfax County, Virginia, within two miles of both the launch area and the control area for Fairfax site W-74 (part of the Washington-Baltimore Defense Area) and is writing a book on the history of NY-53. The author wishes to thank Fort Hancock Nike Missile veteran Bill Jackson, and Park Ranger Historian Tom Hoffman of the Gateway National Recreation Area for their counsel and advice.

For All Commanders and Troops." ARADCOM Argus 1 Nov. 1959: 3. Print.
Hoffman, Thomas. NY-53. August 9, 2016. E-mail.

Bibliography and Works Cited
Sat, Oct 28, 2017 7:37 am

As the author of the article, you have my permission.

Mike
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