

United States Department of the Interior  
National Park Service

FINAL  
COPY  
11-98

National Register of Historic Places  
Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Nike Missile Site C47  
other names/site number NIKE Missile Base C47-Portage/Wheeler

2. Location

street & number Launch site: CR 700 N, Administration/Radar Site: CR 600 N N/A  not for publication  
city or town Portage  vicinity  
state Indiana code IN county Porter code 127 zip code 46368

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this  nomination  request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36CFR Part 60. In my opinion, the property  meets  does not meet the National Register criteria. I recommend that this property be considered significant  nationally  statewide  locally. (  See continuation sheet for additional comments.)

Signature of certifying official/Title

Date

State or Federal agency and bureau

In my opinion, the property  meets  does not meet the National Register criteria. (  See continuation sheet for additional comments.)

Signature of certifying official/Title

Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

- entered in the National Register.  
 See continuation sheet.
- determined eligible for the National Register  
 See continuation sheet.
- determined not eligible for the National Register
- removed from the National Register
- other, (explain:)

Signature of the Keeper

Date of Action

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Classification

Ownership of Property

(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property

(Check only one box)

- building
- district
- site
- structure
- object

Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
20	0	buildings
0	0	sites
13	0	structures
0	0	objects
33	0	Total

Name of related multiple property listing

(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

DEFENSE: Air Facility

Current Functions

(Enter categories from instructions)

VACANT Not in use

RECREATION/CULTURE: Outdoor Recreation

7. Description

Architectural Classification

(Enter categories from instructions)

MODERN:

Materials

(Enter categories from instructions)

foundation CONCRETE

walls CONCRETE

roof SYNTHETIC

other METAL: steel

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
B Property is associated with the lives of persons significant in our past.
C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A owned by a religious institution or used for religious purposes.
B removed from its original location.
C a birthplace or grave.
D a cemetery.
E a reconstructed building, object, or structure.
F a commemorative property.
G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

MILITARY
POLITICS/GOVERNMENT
SOCIAL HISTORY

Period of Significance

1956-1972

Significant Dates

N/A

Significant Person

(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

United States Army

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographic References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
previously listed in the National Register
previously determined eligible by the National Register
designated a National Historic Landmark
recorded by Historic American Buildings Survey #
recorded by Historic American Engineering Record #

Primary location of additional data:

- State Historic Preservation Office
Other State agency
Federal agency
Local government
University
Other

Name of repository:

U.S. Army Archives

Nike Missile Site C47  
Name of Property

Porter IN  
County and State

### 10. Geographical Data

Acreage of Property 29

#### UTM References

(Place additional UTM references on a continuation sheet.)

1 

16	486130	4598200
Zone	Easting	Northing

3 

16	486000	4597830
Zone	Easting	Northing

2 

16	486160	4597830
Zone	Easting	Northing

4 

16	486000	4598210
Zone	Easting	Northing

See continuation sheet

#### Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

#### Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

### 11. Form Prepared By

name/title Don Peterson  
organization The NIKE Preservation Group date 2-23-98  
street & number 21277 Clare Avenue telephone 317/776-3868  
city or town Noblesville state IN zip code 46060

### Additional Documentation

Submit the following items with the completed form:

#### Continuation Sheets

##### Maps

- A USGS map (7.5 or 15 minute series) indicating the property's location.
- A Sketch map for historic districts and properties having large acreage or numerous resources.

##### Photographs

Representative black and white photographs of the property.

#### Additional items

(Check with the SHPO or FPO for any additional items)

### Property Owner

(Complete this item at the request of SHPO or FPO.)

name General Services Administration-Great Lakes Region, Attn: Lucreiza Tatrano ...also see continuation sheet  
street & number John Kluczynski Fed. Bldg. 230 S. Dearborn St. Rm 3820 telephone 312/353-0302  
city or town Chicago state IL zip code 60604

**Paperwork Reduction Act Statement:** This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*).

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

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Section number 7 Page 1 *Nike Missile Site C47, Porter Co., IN*

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***Section 7 - Description***

Nike C-47 air defense site near Portage, Indiana consisted of two separate parcels of land located nearly a mile apart. The first parcel of land was known as the Launcher Area and is located on the south side of County Road 700 North, approximately 1/4 west of County Road 500 West, in Porter County, Indiana. The level site is typical of area's farm land. The base was up and running completely by 1956, construction likely begun in 1954.

Surrounding the fourteen acre site are two 8' tall cyclone fences. These are original to the base. During operation, the site would have been guarded by armed troops and guard dogs. A guard shack remains at the main gate and a guard tower once stood just inside the secondary gates, which protected the launcher elevator area. Guard dogs would have patrolled the area between the fences. A remnant foundation slab of the kennels remains on the base. The Army defended the Nike Hercules warheads stored at the site with all possible means.

The layout of each Nike site varied based on the land acquired. The launcher parcel is narrow and deep, the buildings where the most personnel were located were sited closest to the road, with the service and launching areas clustered to the south. Buildings are oriented to roads and are not strictly arranged in ranks.

The actual launchers, three independent concrete underground bunkers with blast doors, remain intact with elevator equipment and other workings, though they are flooded with water currently. Nike missiles were stored horizontally within heavily constructed underground missile magazines. The typical missile magazine was approximately fifty feet wide by sixty feet long with ten feet of overhead clearance. The missiles could be elevated above ground and moved horizontally to any launcher using elevators and rails. This site has three modules, each with its own magazine, elevator, and ventilation system.

One of the most important buildings at the site is the Administration Building (also known as the Ready Building). This building is a flat roof design and constructed of concrete block (photo 2) and like all buildings at the launcher site it is one story high. It served as the day barracks where the launcher area crew would have their meals and relax during twenty-four hour shifts.

The launcher site also had a guard dog kennel to provide for the guard dogs. All that remains of the kennel is the concrete slab and a portion of the fence.

The Fallout Shelter (photo 8), sits to the east of the main gate. This building is constructed with solid poured concrete walls and roof system. The structure has no windows and once had blast doors to protect its occupants from nuclear fallout. Inside the building, just inside the door, a decontamination station remains intact.

The largest building on the launcher site is the Vehicle Maintenance Building (photo 4). This standard concrete block, flat roofed building has vehicular entries and bays for truck and auto repair.

The installation was totally self sufficient for short periods of time if need be, with its own well house (photo 7) and sanitation facilities. The well house is built on a concrete slab with block walls and flat roof. Also in case of local power failure, C-47 could generate enough power to function with its Engineer Building (photo 5). This slab floor and block wall building had electrical generators and fuel storage capacity.



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The Missile Assembly Area (MAA, photo 6), was designed to house missiles after shipping or during modification. New missiles were uncrated and prepared for storage in the missile magazines. Also, missiles needing maintenance could be moved here and repaired, a safe distance from the other missiles in the magazines. The MAA is a slab-floored, concrete block walled, flat-roofed building.

A Warhead Building located east of the MAA and generator engineer building was for payload storage and installation. Earth berms protected the rest of the base from potential blasts from the warhead building.

All the structures at the launcher area are largely as they were in the early 1970s, when the Defense Department abandoned the site, many still display the military logos and markings unique to military facility. The resources total seven buildings and five structures. The structures include three missile magazines, one fence system (counting all fences as one security system), and one earth berm system. All are original features, contributing resources. The foundation slabs of the kennel and sentry tower are not counted as resources due to their inconsequential scale, but they do add to the history of the site.

The second area was the Control Area, located on the north side of County Road 600 North, near the town of Wheeler. Sometimes, these units were called Administration Area. This parcel is now privately owned and used as a paint ball playground, but still has its cyclone security fencing. The Control Area contained the radar and computer systems used to detect and track hostile aircraft, and to guide the Nike missiles to their targets. U.S. Army personnel had to remain on duty 24 hours in shifts, so this area had all the requirements to perform the task, including barracks, mess hall, barbershop, and about any other service normally found on an Army post.

The Administration Area buildings are grouped along two roads, one more or less east-west, and another meandering diagonally northeast, then turning roughly northwest. The road placement was likely dictated by the facing of the radar towers. Tower placement was likely dictated by the section of the overall defense area that this base was to protect. Essentially, Nike C-47 protected the flanks of Chicago defense area, likely necessitating that the towers make a line perpendicular to a southeast heading.

All five radar towers remain, but the actual operating equipment systems have been removed. The largest tower, clearly visible from the Launcher Area, once supported the HIPAR radar system, used to identify potential targets. The four lower towers (photo 8) supported LOPAR and other radar components which were required to successfully engage enemy aircraft. Each would have been covered with a mushroom-like dome originally, the dome being a lightweight material that protected the radar dish inside.

All the buildings at the Control Area are single story, slab-floored, concrete block walled buildings with flat roofs. The Administration Building (photo 10) housed the day room, supply rooms, barber shop, and orderly room.

Two identical Barracks are narrow block buildings oriented north-south like the Administration Building. Across the street from the Barracks is the Mess Hall (photo 12).

Arranged along the spine of the meandering road are the concrete block buildings that supported the mission of the Nike base directly. These were radar support personnel buildings, and the battery control building. One of the most unique buildings in this part of the Administration Area is the Fallout Shelter. In the event of nuclear war, personnel would be protected inside this structure. Protection for control vans was provided by the vehicle bays of the building. The interior of the building still has the heavy fallout protection doors (photo 13).

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The Control or Administration area also needed to be self-contained in the event of war. It contains its own well house building, and waste water treatment area and treatment building.

Total resources in the Control or Administration Area include: thirteen buildings, five radar towers (structures), a wastewater treatment in-ground enclosure (structure), basketball court (structure), cyclone fence (structure), and parking lot (not counted). All are contributing resources.

The total resource count for both nominated areas is: twenty (20) contributing buildings and thirteen (13) contributing structures.

Although deteriorated, the buildings of both parcels are basically intact. Once encroaching vegetation is cut back, the original manicured appearance of the base would be recreated. After the site was closed in about 1972, the local high school used the launcher area for driver's education practice for a number of years. Later, the local fire department used several buildings in the launcher area for practice exercises, resulting in some interior damage to one or two buildings. Having no decorative features, the structures remain intact with some roof damage. The other buildings remain intact but in need of maintenance. Buildings in the Control or Administration Area are in fair to good condition.

***Section 8 - Statement of Significance***

Nike Missile Site C-47 meets National Register criterion A. The Nike defense system was a significant aspect of both civilian life and military planning during the Cold War era in the United States. Nike missiles were radar guided, supersonic anti-aircraft missiles. In keeping with the U.S. doctrine of "deterrence," planners hoped that systems like the Nike would make a direct attack on the continental states so costly as to be futile. The effort to convey that image in fact required that the Nike be developed, fully deployed, and diligently staffed to succeed. Nike bases were closed by the mid 1970s, and only a handful of the hundreds built remain. C-47 is the only fully intact base intended to protect a major potential target, Chicago. Nike C-47 is also exceptional under criterion consideration G because of its rarity and the importance of the target it protected. It was also among the first bases to deploy Nike Hercules nuclear-tipped missiles.

The Army's first surface to air missile defense program was based on a 17 August 1944 memorandum written by 1st Lt. Jacob W. Schaefer, U.S. Army (Ordnance), and a former employee of Bell Telephone Laboratories. Schaefer proposed the development of a radio-controlled anti-aircraft rocket that could be used to protect large target areas from bomber attack. Planners envisioned a radar and computer guided rocket that would reach supersonic speed, and be able to climb to 70,000 feet. Also, the missile should have a self-destruct capability.

Experience gained during WW II indicated that conventional anti-aircraft artillery would be ineffective against modern jet bombers or high altitude turbo-prop driven planes. Further, the Allies fell heir to a significant body of information after the fall of Nazi Germany in May of 1945. Data on the Henschel anti-shiping rocket and on other experimental air to air missiles provided part of the knowledge to develop the Nike system.

Two events hastened the development and deployment of the Nike. First, military observers realized that the Soviet Union had developed new long range, high altitude bombers capable of reaching U.S. soil. Observers noted large fleets of such bombers at traditional military displays. In at least one case, the Soviets pulled the wool over the West's eyes by flying a squadron of bombers in large circles over the

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same route. Second, in 1949, the Soviets detonated a nuclear bomb. Crude by U.S. standards, none the less, it could surely destroy vast sections of America, with fleets of long range bombers for delivery.

As the Navy, Army, and newly created Air Force rankled over different systems of antiaircraft missiles, President Truman reinforced a long held tenant when he officially put the U.S. Army in charge of protecting the U.S. mainland from air attack. The Army traditionally was in charge of ground based antiaircraft artillery and of protecting civilians from air attack. The Nike was given the official nod and by 1951, prototypes were being tested against surplus B-17 (unmanned) bombers. Several early tests confirmed that the Nike was accurate and reasonably reliable.

The first generation of Nike missiles exceeded the hopes of military planners. The "Ajax" was 34 feet long with booster, 12 inches in diameter, and with its triple warheads weighed 2,455 pounds. It could reach 25 miles and obtained Mach 2 within 30 seconds of launch.

The system depended on three functional areas or components: radar systems to obtain, identify, and track targets; a launch site with capability to handle multiple rockets; and an administrative section to coordinate and authorize launch. These functions could be, and often were, on parcels of land apart from one another.

The mission of the Nike within the continental United States was to act as a "last ditch" line of air defense for selected areas. The Nike system would have been utilized in the event that the Air Force's long-range fighter-interceptor aircraft had failed to destroy any attacking bombers at a greater distance from their intended targets.

Within America, Nike missile sites like C-47 were constructed in defensive rings surrounding major urban and industrial areas. Thirty areas, including Chicago, were deemed to be top priority sites. Chicago was likely selected for this designation because of its population, the presence of several military bases, and the value of the Gary, Indiana steel industry. In all, the Army built about 300 Nike bases in twenty-nine different states. Nike sites also protected key Strategic Air Command bases such as the nuclear facilities at Hanford, Washington. Sites were located on government-owned property where this was available (for example, on military bases, or park lands). However, much of the real estate needed to be acquired in order to construct sufficient bases to provide an adequate defense--a sometimes difficult and contentious process. Often, the federal government had to go to court in order to obtain the property needed for such sites.

The exact number of sites constructed within a particular defensive ring varied depending on many factors. The Chicago defensive area, one of the larger in the nation, had about 20 bases ringing metropolitan Chicago. Due to the relatively short range of the first generation Nike missiles (the "Ajax"), bases had to be fairly close to the urban area they protected. After initial planning, the Army began to buy land and build sites in the first years of the 1950s. By 1954, the initial system was in place and operational nationwide. A dozen cities had defensive rings, additionally, several locations such as Alaska had bases not to protect cities, but for general defense because of their strategic siting in regard to potential Soviet attack.

New generations of Nike missiles expanded the range and capability of the defensive rings. The nuclear-capable "Hercules" could melt fleets of Soviet bombers within a broad range and was deployed at selected sites. At Mach 3, and with a range of 100 miles, the Hercules could enter enemy airspace to intercept planes. Potentially, Hercules missiles could be trained against incoming ICBMs (intercontinental ballistic



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missiles) as well. Within several years of operation, C-47 was one of the first Nike sites to receive and handle the new "Hercules" missiles.

The Nike system protected the United States until 1972, when the last of the bases, including C-47, were closed. SALT accords limited the deployment of the Hercules missiles, and the outset of "detente" saw the need for Nike bases dissolve.

In order to be eligible for the National Register of Historic Places, Nike sites should be exceptional historically and retain a high degree of integrity, including all three major components: administration, radar, and launch functions.

Of the fifteen Nike sites that protected Chicago from within Illinois, several retain some buildings and launch areas. C-84 is the most notable example. None of these fifteen include the radar towers or at least portions of the towers.

Five of the bases in the Chicago ring were in Indiana. C-47 is the only one to retain all three functions, therefore, it is the only base in a major defensive ring with all components of radar, administration, and launch facility. Once again, a few buildings from areas of several bases remain in Indiana. For example, the National Park Service uses several buildings left from a base near the Chellborg Farm not far from the National Lakeshore for service buildings. As elsewhere in the Chicago area, they are disjointed remnants of bases, not complete units. Retention of all three functional areas and buildings sets C-47 aside from most other Nike bases nationally, and makes the base rare in the Midwest. The early use of nuclear missiles on the site furthermore makes C-47 rare and exceptional.

***Section 9--Bibliography.***

Bender, Donald E. *Nike Missile Defense System Overview*. Internet web page, bender@alpha.fdu.edu., online as of 1998.

Carlson, Christina, Robert Lyon, Christine Whitacre, et al. *Last Line of Defense, Nike Missile Sites in Illinois*. Denver, CO: National Park Service, Rocky Mountain System Support Office, 1996.

Center for Air Force History, et al. *Coming in from the Cold, Military Heritage in the Cold War*. U.S. Air Force, Legacy Program, June 1994.

Lennox, Duncan. *Jane's Strategic Weapons System*. Surrey, United Kingdom: Jane's Information Group, 1990.

Morgan, Mark L. and Mark Berhow. *Rings of Supersonic Steel, Air Defenses of the United States Army, 1950-1979, An Introductory History and Site Guide*. San Pedro, CA: Fort MacArthur Museum Association, 1996.

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***Section 10 - Geographical Data - Verbal Boundary Description***

Two discontinuous sites in Porter County, Indiana comprise the base as a functional unit.

The Launcher Site is described as follows:

Begin at the west edge of the access road to the site where it meets the south right of way of CR 700 N, said access road being the first southbound road or drive of any kind west of CR 500 W. Proceed south until a permanent 8' high fence is encountered. Follow 1" outside this, the original base fence, south, then east, then north, then west, then north. At this point, the fence breaks west again toward the SE corner of building 7, rather than follow the fence, proceed due north to the right of way of CR 700 N. Refer also to scale maps included in this nomination.

The Administration / Control Site is described as follows:

Begin at the intersection of the east edge of the access road and the north right of way of CR 600 N, said access road being about 800' west of CR 550 W. Proceed north along the east edge of the access road north until an 8' high chain fence is reached. Follow 1" outside this, which is the original base fence, north, then west, then south, then east until reaching the west edge of the access road. Turn south and follow to the north edge of CR 600 N. Cross the access road to the place of beginning. Refer to enclosed scale map included in this nomination.

***Boundary Justification***

The two parcels are essential to convey the historic function of the Nike base. In this case, the Administration / Control functions were combined on one parcel. The nature of the bases were such that the Launch area needed to be somewhat distant, yet within straight-line radio contact, for safety and strategic reasons. These two parcels comprise those bought to establish the base.

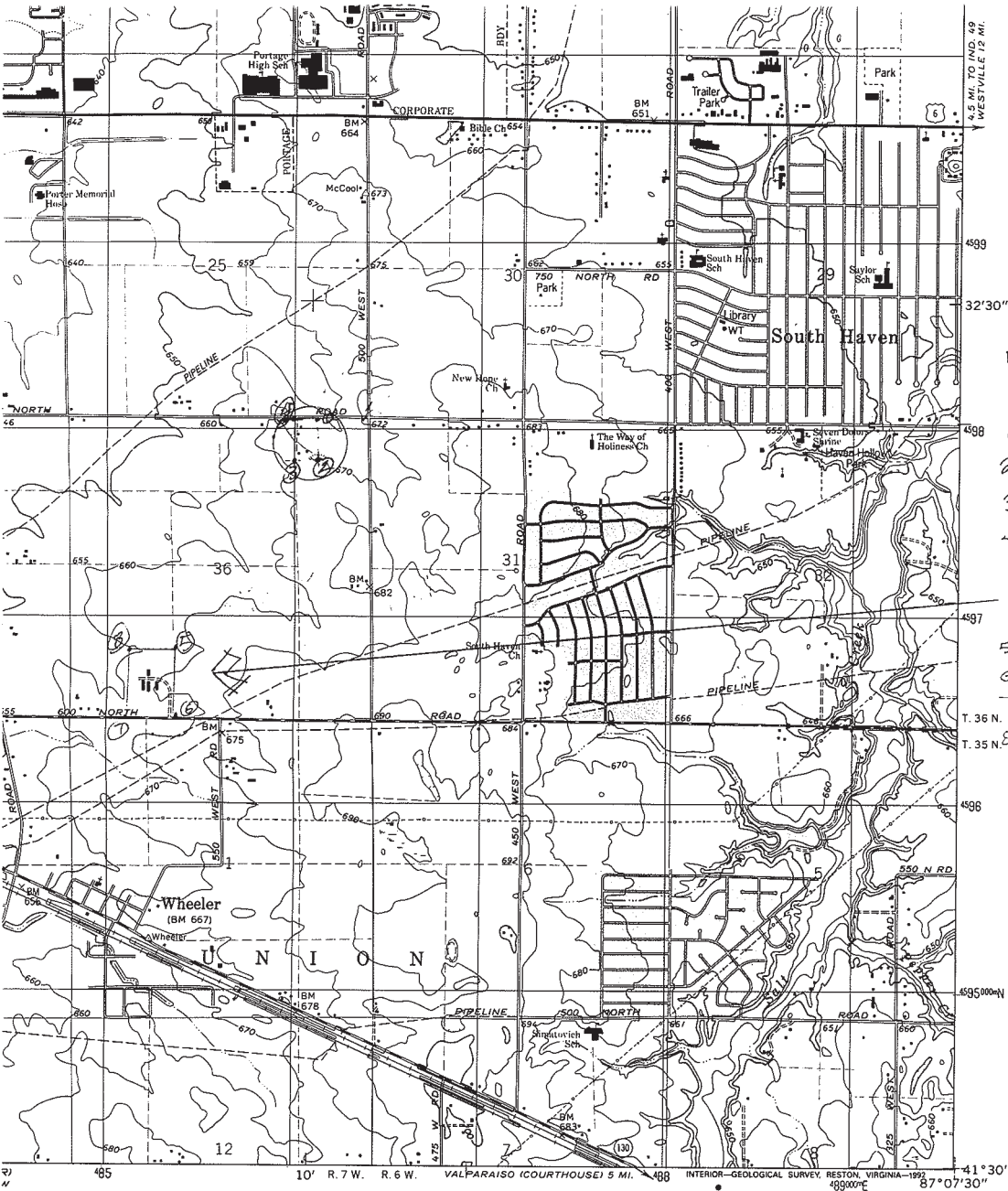
***Additional UTM's:***

5) 16 485370 4596820      6) 16 485370 4596450  
7) 16 485100 4596460      8) 16 485100 4596820

The first set of UTM's includes 14 acres, the second set includes 15 acres.

***Section 11 - Owner, continued:***

2nd owner, owner of Administration / Control Area: Paul Johnson, 608 E. 3rd St., Hobart, IN 46342 219-879-9499

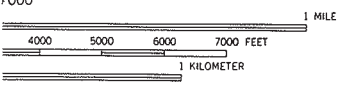


NIKE MISSILE  
SITE C 47  
PORTER CO.  
LAUNCH SITE  
PARCEL  
Z 16

- 1) E 486130
- N 4898200
- E 486160
- 2) N 4897830
- 3) E 486000
- N 4897830
- 4) E 486000
- N 4898210

ADMIN/LEASE  
PARCEL

- 5) 16 485370 4596820
- 6) 16 485370 4596450
- 7) 16 485100 4596160
- 8) 16 485100 4596820



1.10 FEET  
FOOT CONTOURS  
DATUM OF 1929  
DINGS IN FEET  
TIONAL GREAT LAKES DATUM  
NO DATUMS IS VARIABLE



**ROAD CLASSIFICATION**

Primary highway, all weather, hard surface \_\_\_\_\_  
 Light-duty road, all weather improved surface \_\_\_\_\_  
 Secondary highway, all weather, hard surface \_\_\_\_\_  
 Unimproved road, fair or dry weather \_\_\_\_\_

○ Interstate Route    ◻ U. S. Route    ○ State Route

PORTAGE, IND.  
41087-E2-TF-024  
1992

DMA 3567 II SW-SERIES V851

*6075 LYPHAK*

*590 WEST*

*600 NORTH*