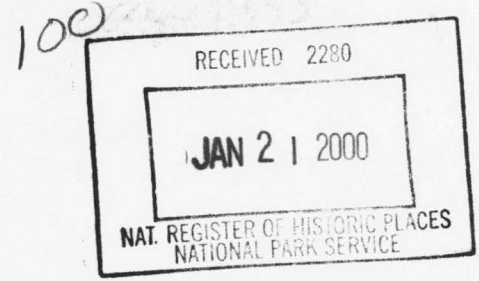


Titan II ICBM Launch Complex 373-5 Site  
Name of Property

White County, Arkansas  
County and State

NPS Form 10-900  
(Rev. 8-86)

OMB No. 1024-0018



**United States Department of the Interior**  
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES  
REGISTRATION FORM**

**1. Name of Property**

Historic Name: Titan II ICBM Launch Complex 373-5 Site

Other Name/Site Number: WH2346

**2. Location**

Street & Number: Approximately .5 miles east of Highway 320 on Highway 36, then .5 miles north on unnamed access road

Not for Publication: NA

City/Town: Center Hill

Vicinity: X

State: AR County: White Code: 145 Zip Code: 72145

**3. Classification**

Ownership of Property: Private

Category of Property: Site

Number of Resources within Property:

Contributing    Noncontributing

\_\_\_ buildings

1 sites

\_\_\_ structures

\_\_\_ objects

1      0 Total

Number of contributing resources previously listed in the National Register: NA

Name of related multiple property listing: Titan II ICBM Launch Complex Sites Associated with the 308<sup>th</sup> Strategic Missile Wing

**4. State/Federal Agency Certification**

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this X 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 36 CFR Part 60. In my opinion, the property X meets \_\_\_ does not meet the National Register Criteria. \_\_\_ See continuation sheet.

  
Signature of certifying official

12-17-99  
Date

Arkansas Historic Preservation Program

State or Federal agency and bureau

In my opinion, the property \_\_\_ meets \_\_\_ does not meet the National Register criteria. \_\_\_ See continuation sheet.

\_\_\_\_\_  
Signature of commenting or other official      Date

\_\_\_\_\_  
State or Federal agency and bureau

**5. National Park Service Certification**

I, hereby certify that this 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):

S. B. Ferguson 3/6/00

Signature of Keeper Date of Action

**6. Function or Use**

Historic: Defense Sub: military facility

Current : Landscape Sub: meadow

**7. Description**

Architectural Classification:

No style

Materials: foundation \_\_\_\_\_ roof \_\_\_\_\_ walls \_\_\_\_\_ other concrete, metal

Describe present and historic physical appearance:

**SUMMARY:**

The Titan II ICBM Silo 373-5 Site is an area of approximately 23 acres near Center Hill in White County containing a former underground Titan II missile launch complex, including concrete site feature pads and earthen mounds reflecting locations of important site features. There are also extensive extant belowground components from the missile launch complex. The control center air intake shaft is filled with grout, but intact. The access portal is partially filled with rubble and the blast lock doors are tack-welded shut. The three-level launch control center is intact, as are the blast lock areas. Control center equipment has been removed, but the three-level facility is intact. The launch duct has been demolished to a depth of 30 feet and the launch duct filled with rubble. Mounded earth fill covers the silo and control center/access portal areas. The site retains a high degree of integrity, containing evidence of most of the salient silo complex features as well as the results of site deactivation. The nomination and its acreage include the approximately one-half mile long access road and the site of the helicopter pad and remnants of its access road.

**ELABORATION:**

The Titan II ICBM Silo 373-5 Site is an area of approximately 23 acres near Center Hill in White County containing a former Titan II missile launch complex, including concrete site feature pads and earthen mounds reflecting locations of important site features. There are also extensive extant belowground resources from the missile launch complex. The control center air intake shaft is filled with grout, but intact. The access portal is partially filled with rubble and the blast lock doors are tack-welded shut. The three-level launch control center is intact, as are the blast lock areas. Control center equipment has been removed, but the three-level facility is intact. The launch duct has been demolished to a depth of 30 feet and the launch duct filled with rubble. Mounded earth fill covers the silo and control center/access portal areas.

The site is located approximately .5 miles north of Highway 16 approximately one-half mile east of its intersection with Highway 25. The access road is the original road built under U.S. Army Corps of Engineers auspices to allow the missile crews access to the site; it is still flanked by the original power line poles that supplied electricity to the launch complex and is included in the nomination, as is the helicopter pad located about one-fourth mile south of the access road terminus and about 16 feet east of the access road. Both the road and the helicopter pad site are included in the nomination.

The site is among the best-preserved of the Titan II ICBM Launch Complex sites, as its owner has limited vegetation growth at the site. It still retains a number of surface site features that clearly identify salient parts of the site's characteristics during its service as a nuclear missile silo.

The surface site features were documented by comparing them to plot, grading and electrical plan drawings prepared by the Ralph M. Parsons Company of Los Angeles, California, in 1962.

Noteworthy surface site features include:

- 1: Drainage culverts at the access road terminus
- 2: The bed of the original patrol road
- 3: Diversity antenna pad
- 4: The UHF antenna pad
- 5: Twin hardened antenna pads adjacent to the control center mound
- 6: The High-Frequency antenna pad
- 7: A hardened concrete oxidizer or fuel stand
- 8: A pair of boring holes



- 9: A hardened concrete oxidizer or fuel stand
- 10: A pair of low-water bridges
- 11: The mound covering the launch duct

There are also extensive belowground resources from the silo facility, including the control center, cableways, blast lock structure, and equipment areas. The control air intake shaft is filled with grout, but intact. The access portal is partially filled with rubble and the blast lock doors are tack-welded shut. The launch control center is intact, as are the blast-lock areas. The launch duct has been demolished to a depth of 30 feet as required by the SALT II accords and the remainder filled with rubble. Mounded earth fill covers the silo and control center/access portal areas. While these are not visible from the surface, the U.S. Army Corps of Engineers dismantling plans for the silo complexes called for most of the belowground components to remain intact but inoperable. Thus, a high percentage of the belowground component of the missile-launch facility are extant.

### 8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties: National.

Applicable National Register Criteria: A

Criteria Considerations (Exceptions): G

Areas of Significance: Military

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Period(s) of Significance: 1961-1987

Significant Dates: June 15, 1963; October 20, 1986; May 1, 1987

Significant Person(s): NA

\_\_\_\_\_

Cultural Affiliation: NA

Architect/Builder: U.S. Army Corps of Engineers  
Ralph M. Parsons Co., Engineers

\_\_\_\_\_

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above:

**SUMMARY:**

The Titan II ICBM Silo 373-5 Site, which contains surface and subsurface remains, is exceptionally important as the best preserved of nine Titan II facilities associated with the 373<sup>rd</sup> Strategic Missile Squadron of the 308<sup>th</sup> Strategic Missile Wing. The number and quality of surface features, provide a high degree of integrity for the site. Coupled with the extensive intact belowground components at the site, they make it eligible for listing on the National Register of Historic Places under Criterion A with national significance within the historic context *Titan II ICBM Launch Complex Sites Associated with the 308<sup>th</sup> Strategic Missile Wing in Arkansas*. Because of the nationally significant role the Titan II missile complexes of the 373<sup>rd</sup> SMS and the 308<sup>th</sup> SMW played in the nuclear strategies of the Cold War, it also meets the “exceptional importance” requirements of Criteria Consideration G: Properties That Have Achieved Significance Within the Last Fifty Years.

**ELABORATION:**

The 373<sup>rd</sup> Strategic Missile Squadron was activated on 1 April 1962, one of only six such squadrons nationwide to man and service the high-yield Titan II missile system, a key component in the United States nuclear deterrent. The 373<sup>rd</sup> SMS and the 308<sup>th</sup> SMW were formally deactivated on 18 August 1987 after 25 years, four months and 18 days of service on the front lines of the Cold War.

Construction of Titan II ICBM Launch Complex 373-5 began on 3 January 1961 and the site was placed on alert on 15 June 1963. Launch Complex 373-5 was taken off of alert on 20 October 1986 after 23 years of service. The headworks demolition took place on 1 May 1987.

Launch Complex 373-5 also was the scene in January 1968 of one of only three military fatalities to befall the 308<sup>th</sup> SMW in Arkansas. (An airman died as a result of the 1980 explosion of the missile at Launch Complex 374-7, and another succumbed to fumes at Launch Complex 373-4 in 1976. In addition, 53 civilian workers died in a flash fire at 373-4 during construction of the launch complex in 1965.) On that January day, Technical Sergeant R.E. Buggie and Airman 1st Class Nastasii came out to Launch Complex 373-5 to perform a general clean up of the launch duct prior to an upcoming inspection. They arrived on the complex and met with Captain N. Hartman, MCCC, for the required maintenance briefing. Hartman read the safety briefing emphasizing the need for the two-point safety harness if they did not lower all of the work platforms as they worked each level.

The gap between the platforms was so small that if all platforms were down the harnesses were not required. Afterwards, Hartman, Airman 1st Class Jackson and Technical Sergeant Shrage went out to clean up on Level 6 while Buggie and Nastasii began work on Level 2 by lowering the work platforms. Two DMCCC' s were on the site that day, 2nd Lieutenant Lind and 2nd Lieutenant D.J. Jacobowitz, and they remained in the launch control center, maintaining the requirement for at least one officer and a total of at least two crew members on Level 2 of the Launch control center manning the consoles.

Buggie and Nastasii planned to work their way down each level within the launch duct, checking and cleaning up as they descended down, level to level, alongside the missile. Buggie wanted to check one of the Level 2 platforms for normal operation after he noticed hydraulic fluid on the grid of the platform. He raised the platform segment again and stepped forward to take a closer look. Unfortunately, the part of the lowered platform he stepped on was wet from the clean up procedure for the hydraulic leak. He lost his footing and fell backwards, off the platform, dropping nearly 100 feet and landing on his back across the 23,000 pound thrust mount that supported the missile.

Jacobowitz remembers hearing Nastasii calling excitedly on the wire maintenance network system that Buggie had fallen down the launch duct. Jacobowitz looked across the console at Lind and asked Nastasii to repeat what he had just said, which he did. Jacobowitz recalls asking if Buggie had fallen all the way down and was temporarily reassured when Natasii replied that no, Buggie had not fallen down to the W, he was laying across the thrust mount. Thinking of the two man policy first, since Buggie had not fallen all the way to the W, Jacobowitz instructed Nastasii to leave the launch duct immediately and wait while he notified Captain Hartman who was now working on Level 6. Lind, seeing that Jacobowitz had turned as white as a sheet, asked what was wrong. Jacobowitz filled him in and then emphasized that they first had to call in a two-man policy violation. Jacobowitz used the voice signaling system inform Hartman of the situation. After filling him in, Jacobowitz asked that he return to the launch control center and take command. Jacobowitz would then return to the launch duct and attend to Buggie. Hartman replied that he would first lower all the work platforms on Level 7 and look at Buggie then pick up Nastasii and return to the launch control center. Hartman got the Level 7 platforms lowered and saw that Buggie was not moving. He returned to the launch control center and after dispatching Jacobowitz and Jackson to the Launch Duct, called in the two-man policy violation to the wing command post and awaited an update from Jacobowitz .

After finding a ladder to climb up to the thrust mount, Jacobowitz and Jackson proceeded as fast as they could to the silo and descended to Level 7 where they entered the launch duct. Jacobowitz was the taller of the two but the ladder was still just a little to short. He remembers hoping that Jackson had a good grip on the ladder as he jumped up to the thrust mount and turned to face Buggie.

Buggie had fallen across the thrust mount with his head towards the missile and legs dangling off the other side. He was not breathing and Jacobowitz was unable to find a pulse on his wrist but did find a slight pulse, or so he thought, on his neck. Jacobowitz began the old style artificial respiration as best he could while awaiting further medical assistance. When the medical team arrived, the doctor joined Jacobowitz on the thrust mount, quickly examined Buggie and told Jacobowitz to stop, Buggie was dead. After Technical Sergeant Buggie's body was removed, Hartman was asked if he wanted his crew relieved. He polled the crew and they all agreed there was no need to bother another crew. Jacobowitz bumped into Hartman 15 years later at the Air War College at Maxwell AFB, Alabama and after a brief discussion of the accident, Jacobowitz remembers that Hartman expressed his thanks and pride that the crew had remained on duty for the full alert.

The number and integrity of site features at the Titan II ICBM Missile Silo 373-5 site make it the most intact of nine former ICBM launch complexes associated with the 373<sup>rd</sup> SMS and show that the overall site has a high degree of integrity of location, design, setting, materials, workmanship, feeling and association of the 26-year span from construction to deactivation. As such, it meets the requirements for listing on the National Register of Historic Places under Criterion A within the historic context *Titan II ICBM Launch Complex Sites Associated with the 308<sup>th</sup> Strategic Missile Wing in Arkansas*. Because of the nationally significant role the Titan II missile complexes of the 373<sup>rd</sup> SMS and the 308<sup>th</sup> SMW played in the nuclear strategies of the Cold War, it also meets the "exceptional importance" requirements of Criteria Consideration G: Properties That Have Achieved Significance Within the Last Fifty Years.

The missile silo complexes of the 308<sup>th</sup> Strategic Missile Wing served in many ways as the front lines of the Cold War, and their deactivation under President Reagan's strategic arms modernization program is a key part in their history. The deactivated silos, as they appear today with their earthen mounds and concrete pads, reflect their entire history, which ultimately culminated in their deactivation and abandonment. Titan II ICBM Complex 373-5 remains a silent and moving reminder of the days when the 308<sup>th</sup> SMW stood at the forefront of the nation's nuclear deterrent.

**9. Major Bibliographical References**

“Ballistic Systems Division Management Data System Titan Master Schedule, March 1965.” Air Force Historical Research Agency, Maxwell AFB, Alabama. This document is classified SECRET. The information used is unclassified.

“Titan Deactivation Program, Little Rock AFB, Arkansas.” Headquarters, Strategic Air Command, Maintenance Directorate. Titan Missile Museum Archives, Sahuarita, Arizona.

“Histories of the 308<sup>th</sup> Strategic Missile Wing, 1963-1987,” Air Force Historical Research Agency, Maxwell AFB, Alabama. These documents are classified SECRET. The information used is declassified

Personal correspondence with Colonel Dan Jacobowitz, USAF, (Ret.) and Colonel N. Hartman, USAF (Ret.), May 1998.

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 -- Specify Repository: \_\_\_\_\_

**10. Geographical Data**

Acreage of Property: Approximately 23

UTM References: Zone Easting Northing Zone Easting Northing

A 15 603750 3901730 B 15 603760 3902720  
C 15 604140 3902720 D 15 604150 3901730

Verbal Boundary Description:

Beginning at a point 50 feet west of the intersection of the southwest corner of an unnamed access road and State Highway 36 proceed north parallel to the access road for a distance of 3000 feet to the road's terminus, then west 137 feet along a perpendicular line, thence due north for 400 feet along a perpendicular line, thence east 400 feet along a perpendicular line, thence south for 400 feet along a perpendicular line, thence west 137 feet to a point approximately 50 feet east of the unnamed access road, thence south parallel to the access road for 300 feet, then east 300 feet along a perpendicular line, thence south 200 feet along a perpendicular line, thence west 500 feet along a perpendicular line to a point 50 feet east of the unnamed access road, thence south parallel to the road to a point 50 feet east of its intersection with Highway 36, then west along the northern edge of said highway to the point of beginning

Boundary Justification:

This boundary contains all of the above- and belowground resources within the four-acre site containing this nuclear missile launch complex that retain their integrity, including the access road and helicopter pad.

=====

**11. Form Prepared By**

=====

Name/Title: Mark Christ, Community Outreach Director/Dr. David Stumpf, contract researcher

Organization: Arkansas Historic Preservation Program Date: 12-17-99

Street & Number: 1500 Tower Bldg., 323 Center St. Telephone: (501) 324-9880

City or Town: Little Rock State: AR ZIP: 72201

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES  
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Titan II ICBM Launch Complex 373-5 Site

MULTIPLE NAME: Titan II ICBM Launch Complex Sites Associated with the 308th Strategic Missile Wing In Arkansas MPS

STATE & COUNTY: ARKANSAS, White

DATE RECEIVED: 1/21/00      DATE OF PENDING LIST: 2/02/00  
DATE OF 16TH DAY: 2/18/00      DATE OF 45TH DAY: 3/07/00  
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 00000100

REASONS FOR REVIEW:

APPEAL: N    DATA PROBLEM: N    LANDSCAPE: N    LESS THAN 50 YEARS: Y  
OTHER: N    PDIL: N    PERIOD: N    PROGRAM UNAPPROVED: N  
REQUEST: N    SAMPLE: N    SLR DRAFT: N    NATIONAL: Y

COMMENT WAIVER: N

     ACCEPT         RETURN         REJECT                         DATE

ABSTRACT/SUMMARY COMMENTS:

The *Titan II ICBM Launch Complex 373-5* site is significant under National Register Criteria A in the area of twentieth century military history. As one of 18 Titan II missile launch complexes historically deployed in Arkansas (and one of 54 deployed nationally), this former military site is an exceptionally significant artifact of the United States' Cold War nuclear weapons program, adeptly reflecting the evolving policies and strategies of America's military arsenal. The Titan ICBM program represented the military's most potent, high-yield nuclear missile system, and its deployment between 1961 and 1986 perfectly matched the era's *mutually assured destruction* (MAD) political/military strategy. Site deactivation in the 1980s, likewise reflected the dramatic changes in U.S. nuclear strategy witnessed during the later part of the Cold War. [Subsequent to deactivation, certain complex facilities were purposefully destroyed or rendered inoperable. These operations, while affecting the integrity of the launch complexes as working models, are nonetheless considered significant aspects of the overall history of the U.S. missile program and of the ability of the respective Titan II sites to convey that history.]

Site 373-5 is among the best preserved of Arkansas' remaining Titan II launch complexes. The property meets the registration requirements developed in the MPS cover document.

RECOM. /CRITERIA Accept Criterion A

REVIEWER Paul R. Lusignan      DISCIPLINE Historian

TELEPHONE \_\_\_\_\_      DATE 2/6/00

DOCUMENTATION see attached comments Y/N see attached SLR Y/N







Titan II ICBM Launch Complex 3735 site

Center Hill vic, White Co, AR

Photo by K. Grunewald

October 1998

Negative on file at AHPP

Helicopter pad, view from northwest



Titan II ICBM Launch Complex 373-5

Center Hill vic., White Co., AR

Photo by M. Christ

October 1998

Negative on file at AHP

Access Road looking north





Titan II ICBM Launch Complex 373-5 Site

Photo by K. Grunewald  
Center Hill, White Co., AR

October 1998

Negative on file at AHPP

Hard stand B, view from southwest





Titan II ICBM Launch Complex 373-5 Site  
Center Hill vic, White Co., AR

October 1998

Photo by K. Grunewald

Negative on file at AHPP

Hard stand A, view from west





Titan II ICBM Launch Complex 373-B Site

Center Hill vic., White Co., AR

Photo by K. Grunewald

October 1998.

Negative on file at AHPP

Looking west along original patrol road bed







Titan II ICBM Launch Complex 373-5 Site  
Center Hill vic., White Co., AR  
Photo by K. Grunewald  
October 1998

Negative on file at AHPP

Hard antenna stand detail





Titan II ICBM Launch Complex 373-5 Site  
Center Hill vic., White Co., AR  
October 1998  
Photo by K. Grunewald  
Negative on file at AHPP  
HF Antenna, view from west





Titan II ICBM Launch Complex 373-5 Site

Center Hill vic., White Co., AR

Photo by K. Grunewald

October 1998

Negative on file at AHPP

View from southwest; UHF Antenna stand in foreground,  
Hardened antenna stands visible beyond.



Titan II ICBM Launch Complex 373-5 Site  
Center Hill vic., White Co., AR

Photo by M. Christ

October 1998  
Negatives on file at AHPP

View of diversity antenna from southwest shows access  
road terminus, hard stand B in distance





Titan II ICBM Launch Complex 373-5 Site  
Center Hill vic., White Co, AR

October 1998

Photo by M. Christ

Negative on file at AHPP

Hardened antenna stands, view from West





Titan II ICBM Launch Complex 373-5 Site  
Center Hill vicy, White Co., AR

Photo by K. Grunewald

October 1998

Negative on file at AHPP

Detail of low water bridge B





Titan II ICBM Launch Complex 373-5 Site  
Center Hill vic., White Co., AR

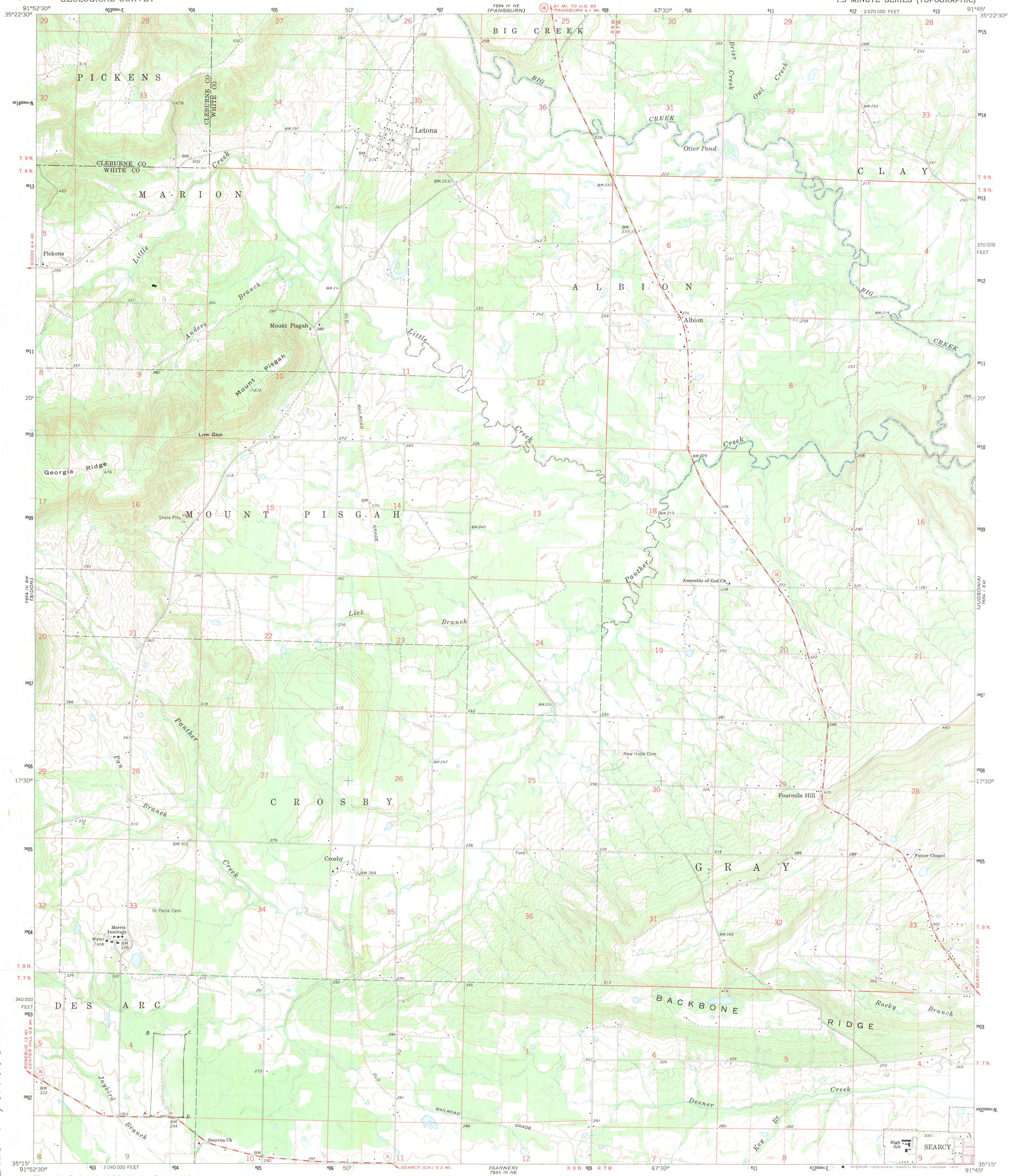
Photo by M. Christ

October 1998

Negative on file at AHPP

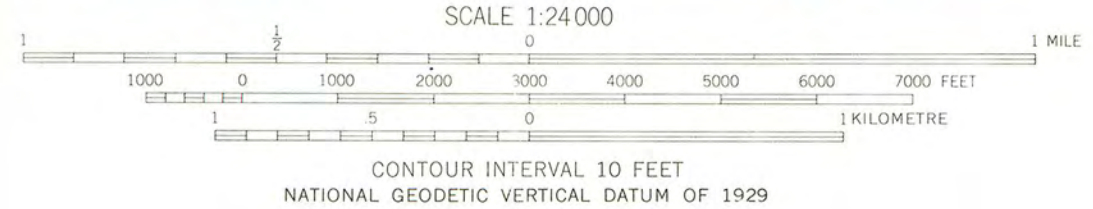
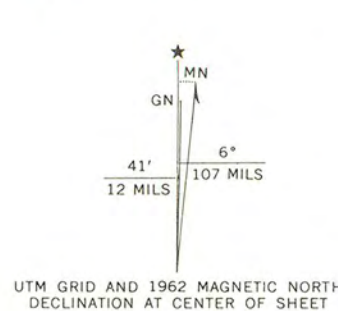
View of hard antenna stands from northwest  
with launch duct mound in distance





Titan II ICB Launch Complex 373-5 Site  
Center Hill, White Co., AR  
A 15/603750/3901730 B 15/603760/3902720  
C 15/604140/3902720 D 15/604150/3901730

Mapped, edited, and published by the Geological Survey  
Control by USGS and USC&GS  
Topography by photogrammetric methods from aerial photographs taken 1960. Field checked 1962  
Polyconic projection. 1927 North American datum  
10,000-foot grid based on Arkansas coordinate system, north zone  
1000-metre Universal Transverse Mercator grid ticks, zone 15, shown in blue  
Red tint indicates area in which only landmark buildings are shown  
Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

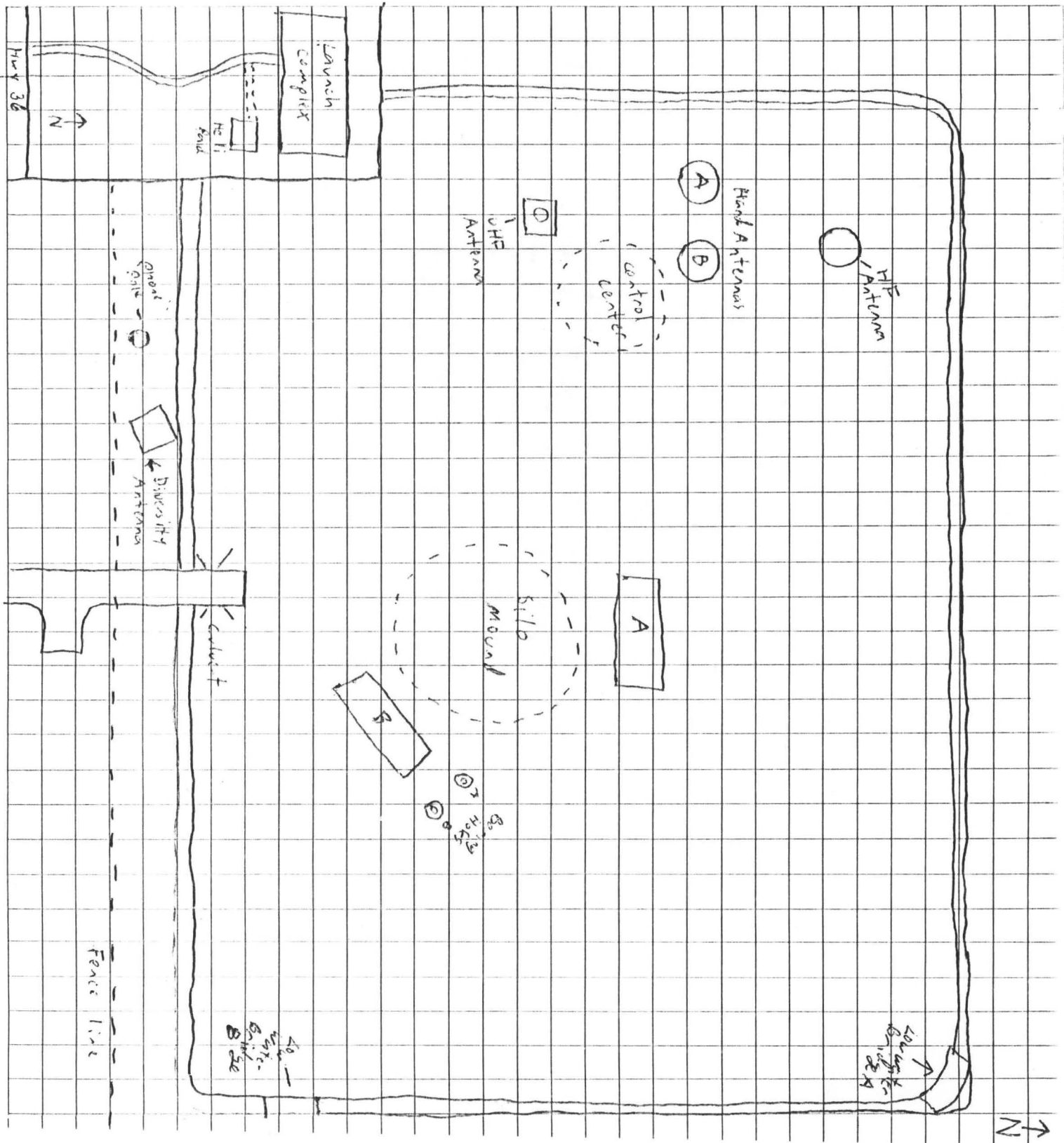


THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092  
AND BY THE ARKANSAS GEOLOGICAL COMMISSION, LITTLE ROCK, ARKANSAS 72201  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

LETONA, ARK.  
N3515-W9145/7.5

1962  
AMS 7654 IV SE—SERIES V884





SKETCH MAP  
 Titan II ICBM Launch Complex 373-5 Site  
 Center Hill vic., White Co., AR



ARKANSAS  
HISTORIC  
PRESERVATION  
PROGRAM

December 17, 1999

Carol D. Shull  
Chief of Registration  
United States Department of the Interior  
National Register of Historic Places  
National Park Service  
Suite 400  
800 North Capitol Street, NW  
Washington, D.C. 20002

RE: Titan II ICBM Launch Complex Sites Associated with the 308<sup>th</sup> Strategic Missile Wing in  
Arkansas Multiple-Property Nomination

Dear Carol:

We are enclosing for your review the above-referenced nomination. The Arkansas Historic Preservation Program has complied with all applicable nominating procedures and notification requirements in the nomination process.

We have substantially reworked and revised this nomination in response to Paul Lusignan's insightful observations that accompanied the initial submission when returned last year and feel that we have adequately addressed his concerns. The nomination is stronger for it, and we feel we have made the case for exceptional importance and national significance for all three of the nominated properties.

Thank you for your consideration in this matter.

Sincerely,

Cathy Buford Slater  
State Historic Preservation Officer

enc.

