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

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Not for Publication: NA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 308th 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 — Date: 12-17-99

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): _____

_____ _____ _____
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 373rd Strategic Missile Squadron of the 308th 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 308th Strategic Missile Wing in Arkansas*. Because of the nationally significant role the Titan II missile complexes of the 373rd SMS and the 308th 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 373rd 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 373rd SMS and the 308th 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 308th 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. His 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 373rd 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 308th Strategic Missile Wing in Arkansas*. Because of the nationally significant role the Titan II missile complexes of the 373rd SMS and the 308th 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 308th 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 308th 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 308th 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:

x 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:

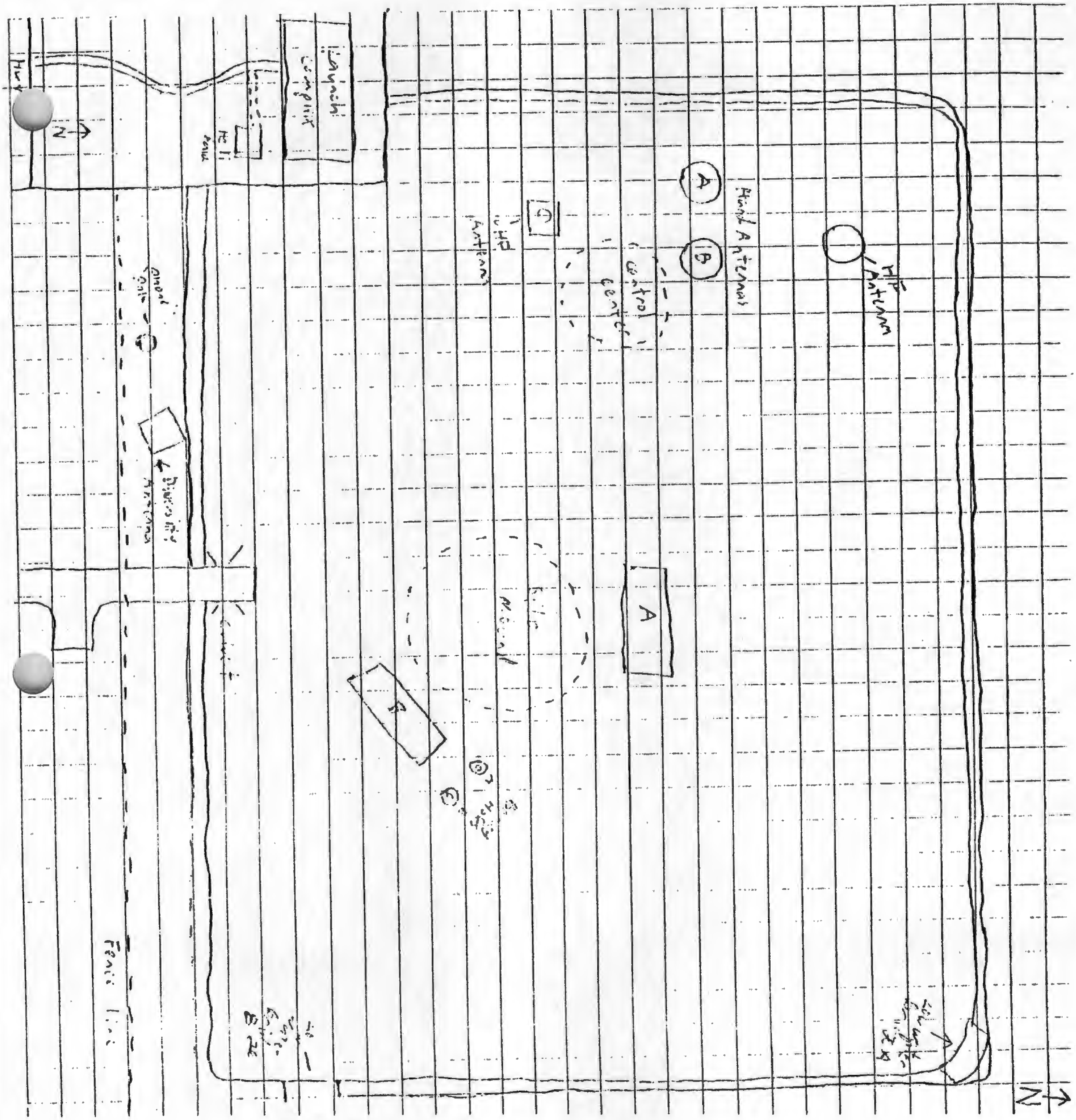
This boundary contains all of the above- and belowground resources within the four-acre site containing this nuclear missile launch complex that retain their integrity, including the access road and helicopter pad.

11. Form Prepared By

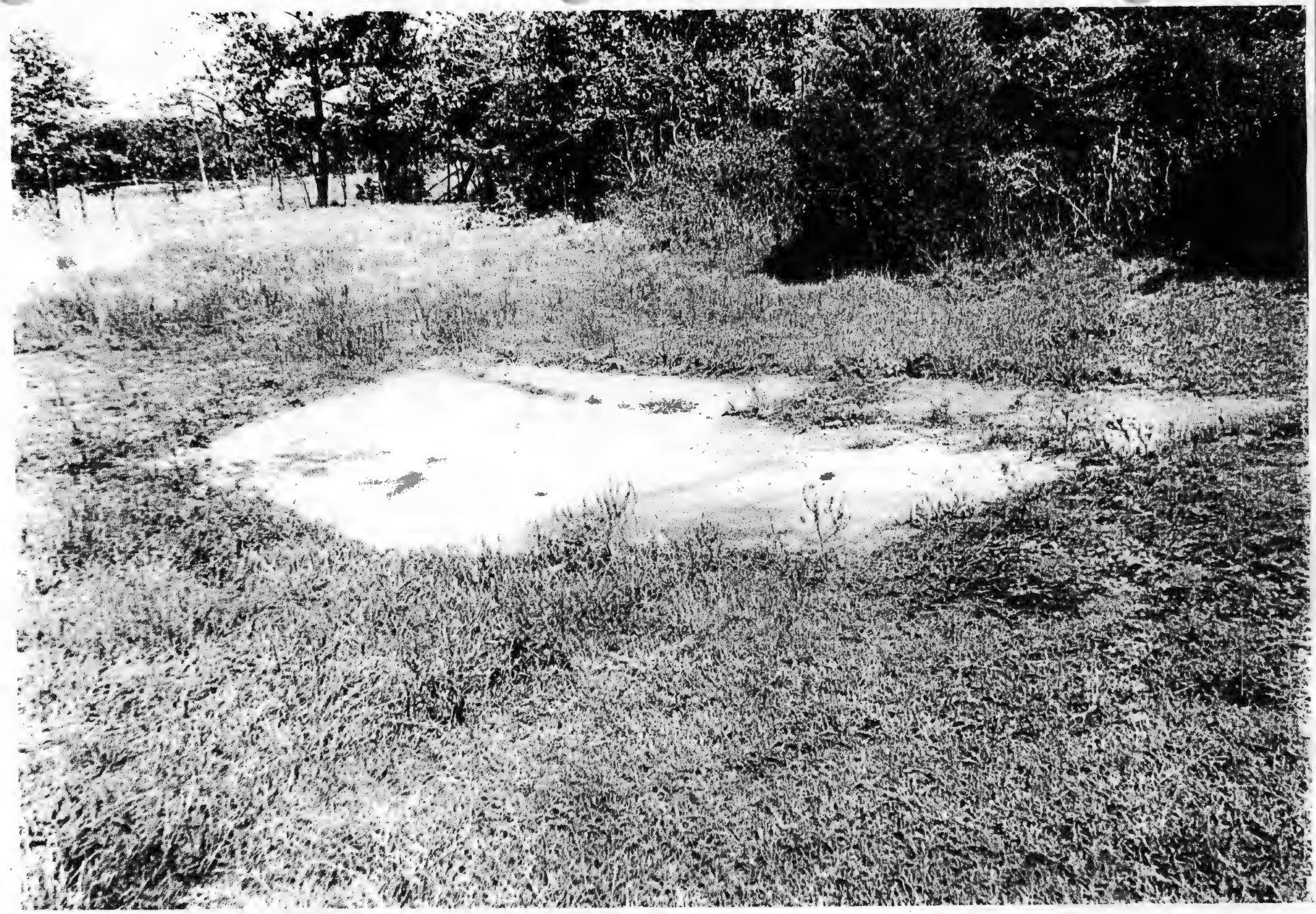
Name/Title: Mark Christ, Community Outreach Director/Dr. David Stumpf, contract researcher

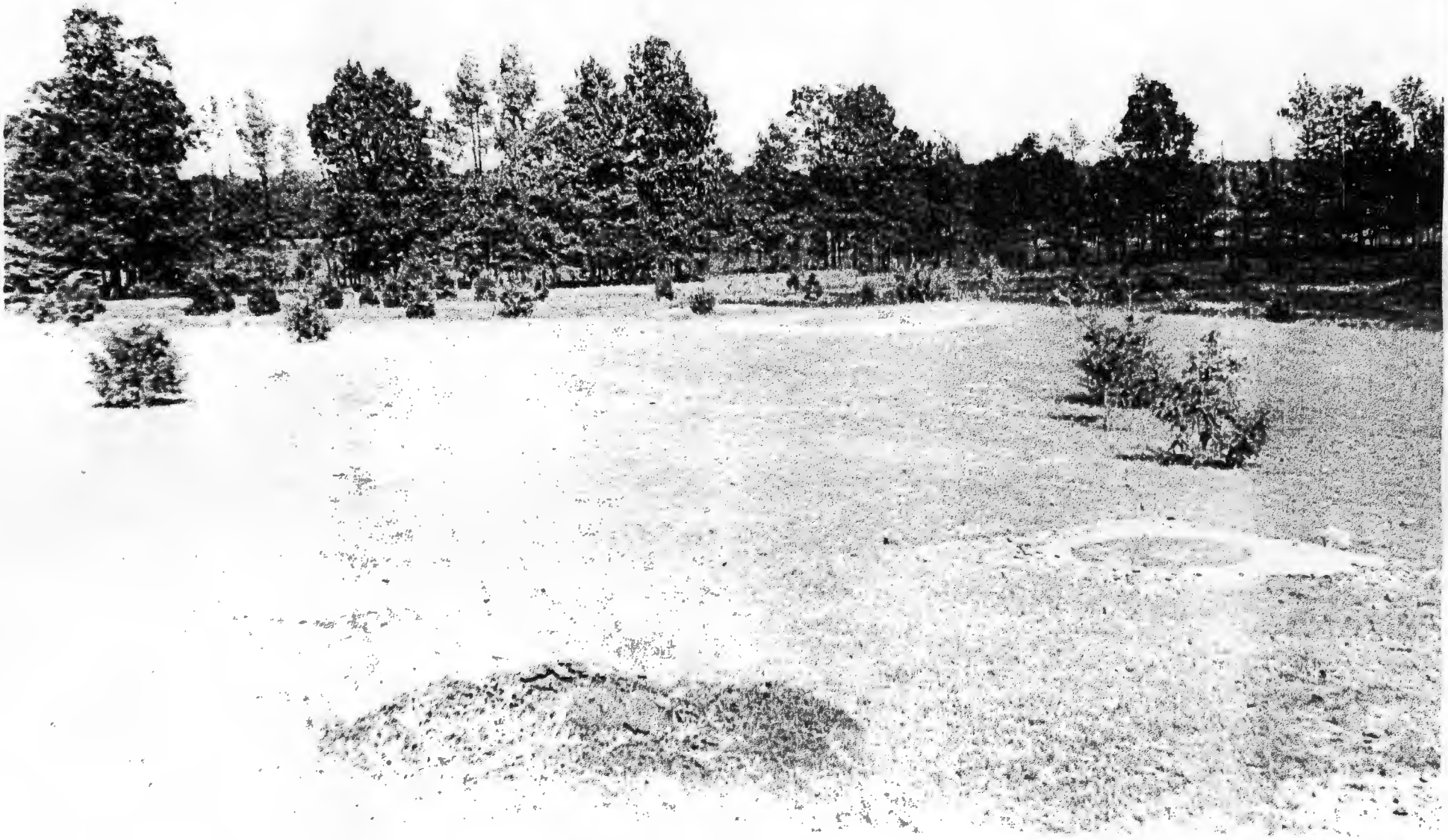
Organization: Arkansas Historic Preservation Program Date: 12-17-99

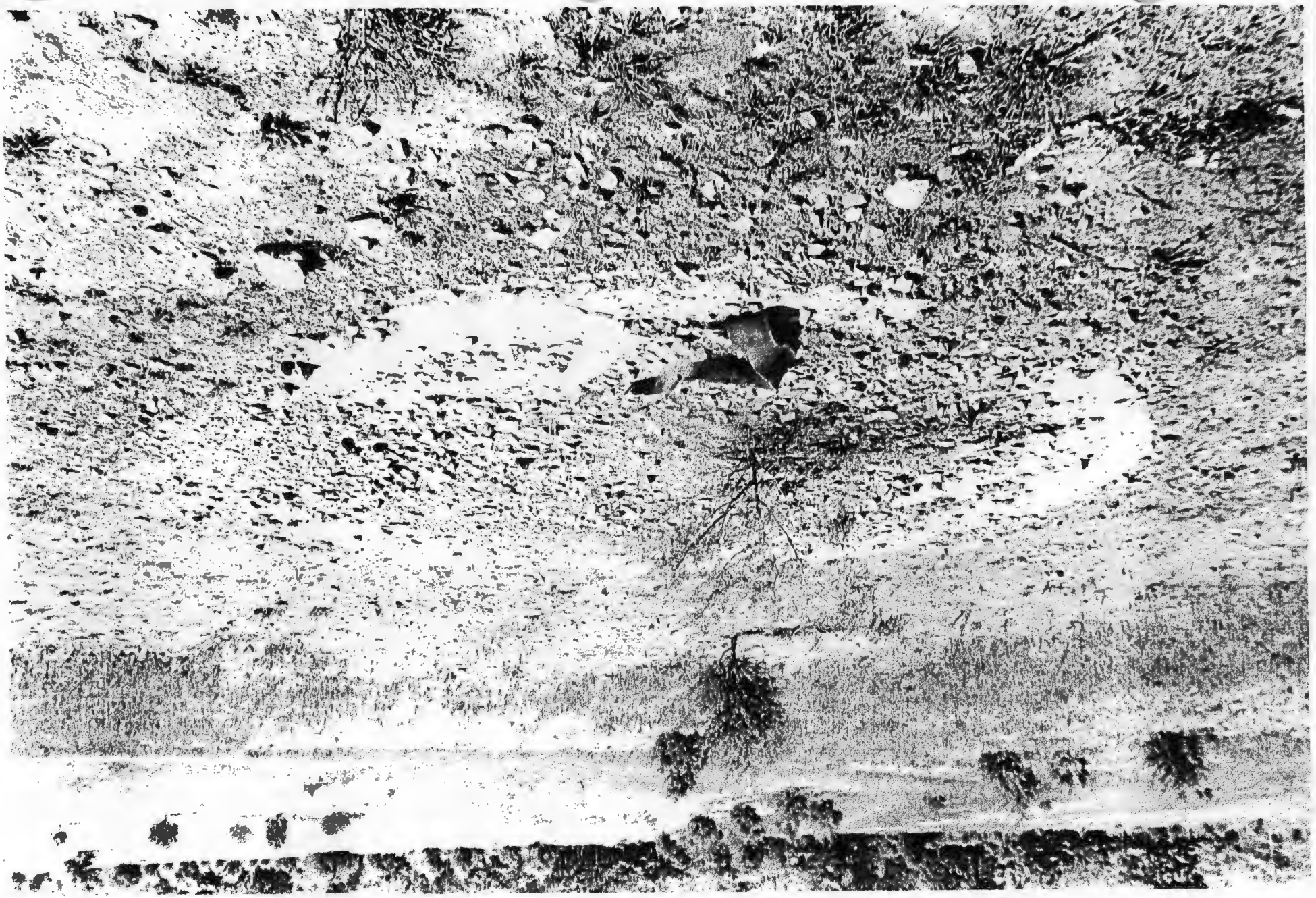
Street & Number: 1500 Tower Bldg., 323 Center St. Telephone:(501) 324-9880
City or Town: Little Rock State: AR ZIP: 72201

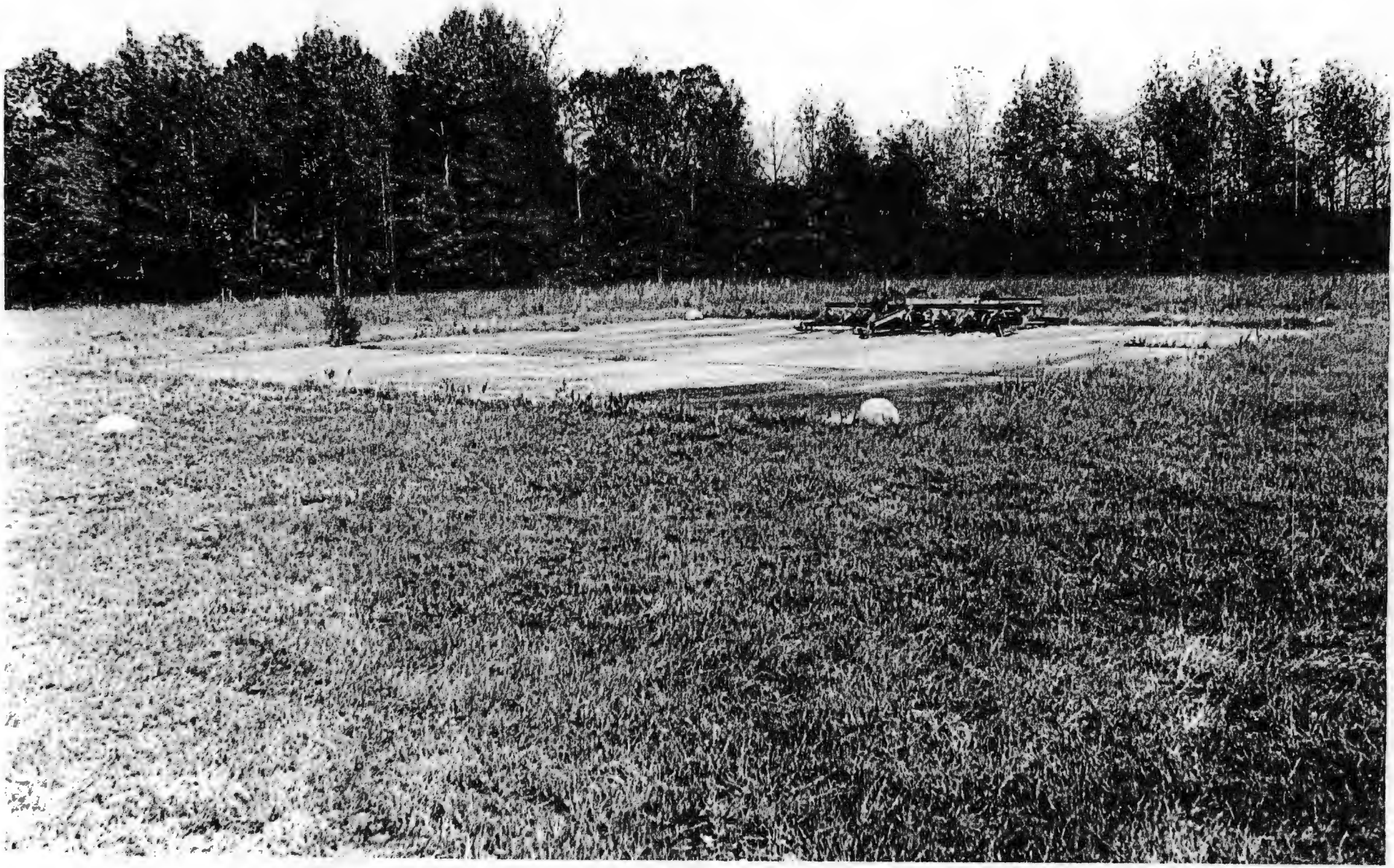


SKETCH MAP
Titan II ICBM Launch Complex 373-5 Site
Center Hill vic., White Co., AR

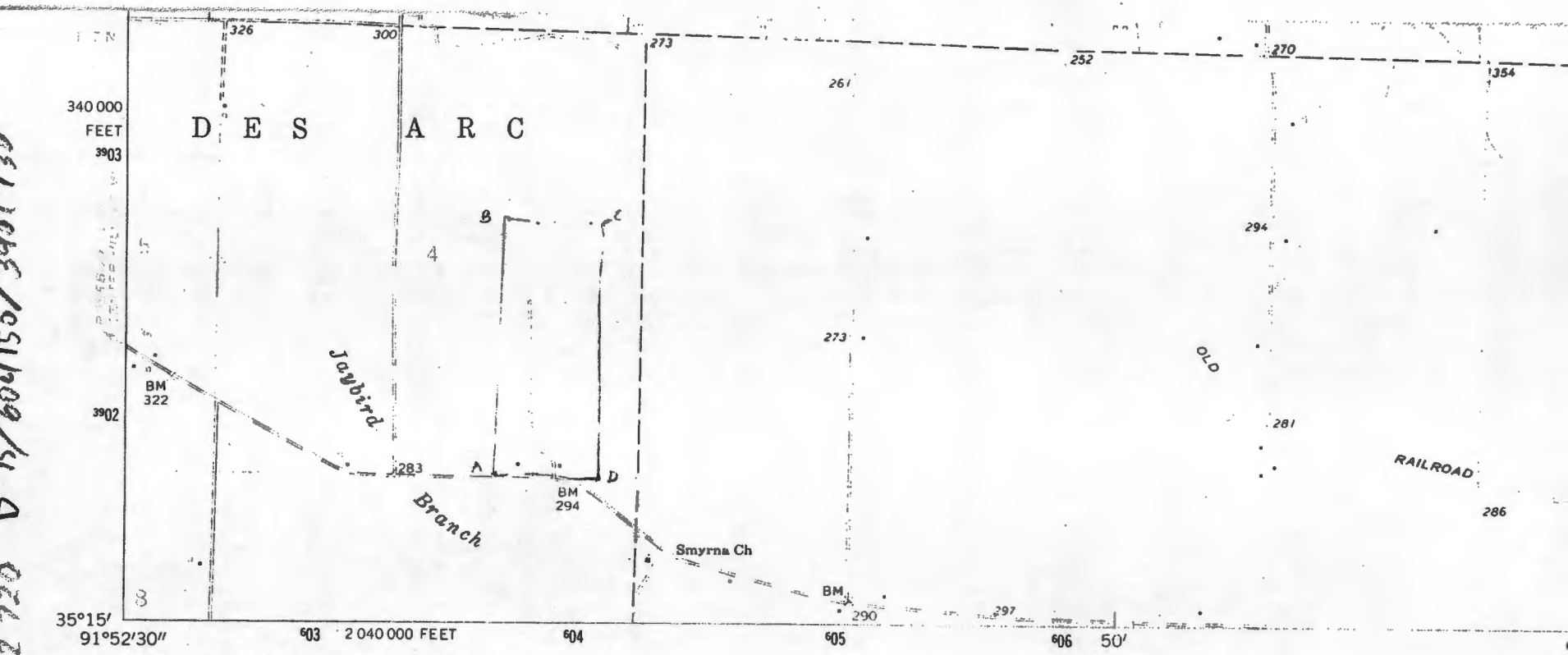








Titan II ICBM Launch Complex 373-5 Site
Center Hill (White Co.) AR
A 15/603750/3901730 B 15/603760/3902720
C 15/604140/3902720 D 15/604150/3901730



(FLOYD) 7054 III NW

Mapped, edited, and published by the Geological Survey

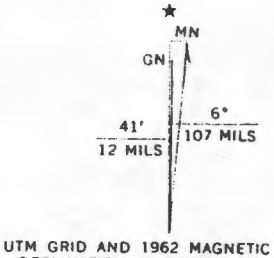
Control by USGS and USC&GS

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



UTM GRID AND 1962 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SC

CONTOUR
NATIONAL GEODETI

THIS MAP COMPLIES WITH
FOR SALE BY U. S. GEOLOGICAL SURVEY. DE
AND BY THE ARKANSAS GEOLOGICAL
A FOLDER DESCRIBING TOPOGRAPHIC