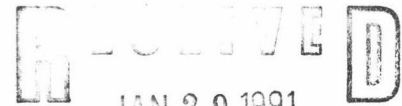


United States Department of the Interior  
National Park Service



National Register of Historic Places  
Registration Form

NATIONAL  
REGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 18). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Leap-The-Dips

other names/site number N/A

2. Location

street & number 700 Park Avenue

N/A not for publication

city, town Altoona

N/A vicinity

state Pennsylvania code PA

county Blair

code 013

zip code 16602

3. Classification

Ownership of Property

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

Category of Property

- building(s)
- district
- site
- structure
- object

Number of Resources within Property

Contributing	Noncontributing
_____	_____ buildings
_____	_____ sites
<u>1</u>	_____ structures
_____	_____ objects
<u>1</u>	<u>0</u> Total

Name of related multiple property listing:

N/A

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, 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 36 CFR Part 60. In my opinion, the property  meets  does not meet the National Register criteria.  See continuation sheet.

Dr. Brent D. Glass

1/23/91  
Date

Signature of certifying official

Pennsylvania Historical & Museum Commission

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): \_\_\_\_\_

Patrick Andrews

3/15/91

for Signature of the Keeper

Date of Action

**6. Function or Use****Historic Functions (enter categories from instructions)**

Recreation and Culture/Fair

Other: Roller Coaster

**Current Functions (enter categories from instructions)**

Work In Progress

**7. Description****Architectural Classification**

(enter categories from instructions)

Other: Roller Coaster

**Materials (enter categories from instructions)**foundation N/Awalls N/AN/A

roof

other Wood**Describe present and historic physical appearance.**

Leap-the-Dips is a Side-Friction Figure Eight roller coaster constructed in 1902 by E. Joy Morris of Philadelphia, Pa. The roller coaster is located in Lakemont Park in Altoona, Pennsylvania. Lakemont Park was originally developed by the Altoona and Logan Valley Electric Railway Company in the 1890's. The roller coaster and its components occupy roughly a rectangular area measuring 84 feet by 229 feet. The resource consists of the figure eight course of track mounted on a wood trestle support structure, a station pavilion, a small storage shed for the coaster cars, a small shed housing the chain motor, and the individual 2-seat cars. The site of the ride is currently flat. Early photographs of the ride show a wide swale beneath the ride which was apparently filled in at some point and the lengths of the trestle uprights shortened accordingly. Early photographs also indicate that a section of tangent track leading from the final curve to the station originally contained one small dip which was later replaced by two small dips. All other major aspects of the ride are essentially unchanged from the original construction. Leap-the-Dips is an excellent example of the once common Side-Friction Figure Eight roller coaster retaining all of the significant characteristics and details typical of the hundreds of such rides constructed during the first two decades of the twentieth century.

The dominate feature of the resource is the figure eight course of track and the structure on which it is supported. The track's rails consist of a pair of flat longitudinal boards laid parallel to support the weight-bearing non-flanged wheels of the cars, and a pair of flat friction boards positioned vertically on each side of the track and which are contacted by separate non-flanged guide wheels mounted vertically on the sides of the cars. Both pairs of boards have thin strips of steel mounted on their surface to provide a hard wearing low-friction surface for the cars' wheels. The rails are mounted on a trestle support structure. Each bent of the trestle structure consists of a pair of upright timbers connected by one or more cross ledger boards which support the rails. The bents are connected to each other by diagonal wood bracing.

Leaving the station, the track makes a left turn and descends a short section of tangent track. It then climbs an inclined lift hill to a height of 41 feet which is the highest point on the course of track. A two-stage electrically driven chain hoist pulls the cars to this high point. A series of hinged wooden paddles mounted horizontally on each side of the track on the lift hill act as ratchets to prevent the cars from slipping backward down the hill in the event that the chain should break or fail. At the summit of the lift hill the track passes beneath a small peaked, steeple-like roof which extends the total height of the structure to 54 feet.

**United States Department of the Interior  
National Park Service****National Register of Historic Places  
Continuation Sheet**

Leap-the-Dips

Section number 7 Page 1

From the summit the track dips slightly and then follows a gradually descending profile through a series of large radius curves arranged in a series of two and one-half figure eights forming a multi-layered course with the track occupying different levels within the same structure. The width of the figure eight structure measures 84 feet at its widest, and 192 feet from front to back. Where the track passes under itself at the crossings of the figure eights, the profile is broken by a slight dip in the track. After the last curve the track returns to the station over a tangent section containing two small dips. The final 60 feet of this tangent track contains a friction brake for slowing the cars and is covered by a roof measuring 10 feet in width, the purpose of the roof being to keep the brakes dry. The track makes a left turn as it enters the station.

The station consists of an open pavilion at the front of the ride. The rectangular pavilion, measuring 70 feet wide by 37 feet deep, is constructed of wood and is covered by a shingled, steeply pitched hip roof. The front of the station has a low wood platform with benches where passengers can gather and wait for the cars. Behind this low platform is a raised boarding platform reached by steps. The track is behind the boarding platform. Another low platform area behind the track provides space for the ride's operators. A hand-operated friction brake stops the cars as they enter the station.

Extending from the rear of the station at an acute angle is a wooden shed measuring 60 feet long by 21 feet wide. This shed is used for the storage of the cars. The shed consists of a series of adjacent stalls each measuring 9 feet wide by 21 feet deep and a transfer track running the length of the shed past the open fronts of the stalls. A small, movable platform containing a short section of track is mounted on the transfer track and can be pushed between the main track in the station and any of the individual stalls.

A small wooden shed measuring 18 feet by 19 feet is located near the base of the lift hill of the main structure and houses the motor which drives the lift hill chain hoist.

The sleigh-like cars are constructed of wood and contain two upholstered seats each wide enough to seat two adults. Each car rests on four non-flanged steel wheels mounted beneath the cars. Two non-flanged steel wheels are mounted vertically on each side of the car for steering the car on the course.

**8. Statement of Significance**

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

nationally     statewide     locally

Applicable National Register Criteria     A     B     C     D

Criteria Considerations (Exceptions)     A     B     C     D     E     F     G

Areas of Significance (enter categories from instructions)

Entertainment/Recreation  
Engineering  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Period of Significance

1900- 1940  
\_\_\_\_\_  
\_\_\_\_\_

Significant Dates

1902  
\_\_\_\_\_  
\_\_\_\_\_

Cultural Affiliation

N/A  
\_\_\_\_\_  
\_\_\_\_\_

Significant Person

N/A

Architect/Builder

Morris, Edward Joy

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

Leap-the-Dips is the last remaining example of a Side-Friction Figure Eight roller coaster. Side-Friction Figure Eight roller coasters were once common in amusement parks across North America as well as in parks in other parts of the world. Amusement parks first appeared in the latter half of the nineteenth century, and quickly became a common and significant form of popular culture and recreation. The development of the roller coaster occurred in parallel with the development of the amusement park and was a signature attraction at nearly all parks. The Side-Friction Figure Eight type of coaster represented an important stage in the technological evolution of the roller coaster.

The early period of the roller coaster, from the appearance of the first commercial coaster at Coney Island in 1884 through the World War I era, was dominated by two technologies: Scenic Railways and Side-Frictions.

Scenic Railways were essentially miniature railways with flanged-wheeled cars running on narrow gauge tracks. Most Scenic Railways had brakemen riding the cars to control the speed of the trains, especially on curves. Many of the rides were constructed fully or partially within buildings, artificial mountains, and other structures housing elaborate scenery, giving rise to the generic term "Scenic Railway".

Side-Friction coasters employed cars with two sets of non-flanged wheels. One set supported the weight of the cars. The other set, called friction wheels, were mounted vertically on the sides of the cars and ran against sideboards mounted on each side of the track, steering the cars on their course. The arrangement gave the appearance of the cars running in a shallow trough. By eliminating concerns of derailments and overturning, Side-Frictions could operate without brakemen and could run at higher speeds, especially on curves.

There were two general types of Side-Frictions: Figure Eights and Non-Figure Eights.

**9. Major Bibliographical References**

Fried, Frederick. "E. Joy Morris and the Evolution of the Philadelphia Toboggan Company". Merry-Go-Round Up, 16:1 (Spring 1989), 7-19, 31, 32, 34.

Lakemont Park, Illustrated Booklet located with Mary Ellen Leidy, 411 4th St., Lakemont, Altoona, Pa. 16602

Morris, E. Joy. "Toboggan-Slide". Washington: United States Patent Office, Letters Patent No. 522025, June 26, 1894.

Pine, William, editor. A History of Lakemont Park. Altoona: Lakemont Park Historical Museum, Inc., 1990.

See continuation sheet

**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**

Acreeage of property Less than one acre

**UTM References**

A 17 720710 4483060  
 Zone Easting Northing

C \_\_\_\_\_

B \_\_\_\_\_  
 Zone Easting Northing

D \_\_\_\_\_

See continuation sheet

**Verbal Boundary Description**

The roller coaster and its component parts fit within a rectangular area measuring approximately 235 feet by 85 feet. The center of the figure eight (not the center of the rectangle) is located approximately 775 feet east and 190 feet north of the intersection of the centerlines of new US Route 220 and Logan Boulevard. (See scale map.)

See continuation sheet

**Boundary Justification**

The boundary is a rectangular area drawn to immediately encompass the roller coaster and its component parts. The nominated property is surrounded by noncontributing resources. To the northwest and west are 1970s or 1980s picnic pavilions. Due north is a children's roller coaster from c. 1950s or 1960s. A concrete block maintenance shed and garage, both c. 1970s, are to the east, as are two small amusements.

See continuation sheet

**11. Form Prepared By**

name/title Tom E. Halterman

organization American Coaster Enthusiasts date October 16, 1990

street & number 2320 Green St. telephone (215) 922-8080

city or town Philadelphia state PA zip code 19130

**United States Department of the Interior  
National Park Service****National Register of Historic Places  
Continuation Sheet**

Leap-the-Dips

Section number 8 Page 1

Patented by Edward Joy Morris in 1894, the Figure Eight consisted of a gradually descending profile in a multi-layered figure eight plan with the track crossing under itself in the middle several times during the course of the descent. The manufacturer used the term "Toboggan Slide" as a generic name for these rides, but many parks applied their own name. The Figure Eight was very popular, and became a standard fixture in parks across the country and in many other parts of the world during the first two decades of the twentieth century. Hundreds of Figure Eights were constructed by Edward Joy Morris's company located in Philadelphia, PA as well as by others using Morris's design under various agreements. A 1904 advertisement for the E. Joy Morris Co. listed 18 Figure Eights in operation by that year including six in Pennsylvania. The many postcards from that era give rise to the belief that most, if not all, of the Figure Eights were built to an identical design. Unlike most wooden roller coasters which are unique designs customized for each location, the Side-Friction Figure Eights were built to a standardized design.

Non-Figure Eights were built to a variety of custom plans and profiles, and often featured more ups and downs rather than a continuously descending profile.

In the years following World War I, the Scenic Railways and the Side-Friction coasters, both Figure Eights and Non-Figure Eights, were rapidly supplanted by coasters employing the newly-developed under-friction system and safety wheels which made possible the far more intensely thrilling designs typical of the 1920's. The under-friction/safety wheel system is the standard technology used for wood coasters to this day.

It is not known when the last Side-Friction Figure Eights were constructed, but by the beginning of the 1920's these rides had fallen out of favor, at least in the United States. It is believed that some Scenic Railways were built in other parts of the world as late as the 1950's.

While a few Scenic Railways are still in operation in other parts of the world, the last Scenic Railway in North America was demolished following the closing of Willow Grove Park near Philadelphia in the late 1970's.

In 1990 there are only two Side-Frictions existing in the world. One of these survivors is a Non-Figure Eight type, the Giant Coaster, which was constructed at Crystal Beach, Ontario, in 1916. It operated through the 1989 season after which the park closed permanently. The ride was sold at auction to a businessman who hoped to dismantle the ride, re-furbish its parts, and eventually re-erect it elsewhere. At this time it is still standing at Crystal Beach but faces an uncertain future.

The other surviving Side-Friction is Leap-the-Dips, a Figure Eight built at Lakemont Park in Altoona, Pennsylvania in 1902. It operated through the 1985 season after which the park changed ownership and was substantially re-developed. The entire ride is fully intact, and the current owner of the park plans to refurbish the ride for resumption of operation during the 1991 season.

Leap-the-Dips is believed to be the oldest standing roller coaster in the world, and is the last remaining example of the Side-Friction Figure Eight. During the first two decades of this century, large numbers of substantially identical rides were in operation in parks across America as well as in other parts of the world. Leap-the-Dips is the sole surviving representative of a very important period in the history of the roller coaster and the amusement park.

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

# **National Register of Historic Places Continuation Sheet**

Leap the Dips

Section number 10 Page 1

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rides moved to the park in the 1980s. To the southeast is a small shop c. 1980s, and to the south a 1960s era Bumper Cars ride.

**United States Department of the Interior  
National Park Service****National Register of Historic Places  
Continuation Sheet**

Leap-the-Dips

PHOTOGRAPHS

Section number \_\_\_\_\_ Page 1

- 
- I. 1. Leap-the-Dips  
2. Altoona, Pa.  
3. Tom Halterman  
4. July 15, 1990  
5. Tom Halterman, 2320 Green St., Philadelphia, Pa. 19130  
6. General view of the coaster from the front toward the rear of the ride showing the station pavilion, and the initial lift hill with its peak-roofed summit. One of the two-seat cars is visible on display in the forward center of the station.  
7. Photo No. 1

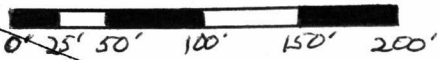
(The first five items of information are the same for all of the following photographs)

- II. 6. View from the rear toward the front of the coaster showing the figure-eight layout of the track and its trestle supporting structure. The shed housing the chain motor is visible to the right of the tree. The two small dips on the final run toward the station are visible as the lowest tier of trackage to the right.  
7. Photo No. 2
- III. 6. Close-up view of the side-friction type track showing one of the flat boards that support the weight-bearing wheels and the two vertical boards which steer the cars on their course.  
7. Photo No. 3
- IV. 6. View looking up the initial lift hill with portions of the figure-eight layout and structure to the left. The two stage chain can be seen in the center of the track approaching the lift hill and on the lift hill. The horizontal boards on either side of the lift hill track are the paddles which prevent the cars from rolling backward. A portion of the car storage shed is visible in the left of the photo.  
7. Photo No. 4
- V. 6. View from the station platform toward the rear of the car storage shed showing the cars in their stalls. A movable platform with a section of track rolls along the flat area in front of the stalls to move the cars between their stalls and the main track in the station.  
7. Photo No. 5
- VI. 6. View of two cars sitting in the station. The high platform to the left is for boarding and alighting riders; the low area to the right is for the ride operators. A side-friction board on the visible side of the cars is not used in the station; the side friction wheels can be seen on this side of the cars.  
7. Photo No. 6

LEAP THE DIPS

BLAIR COUNTY

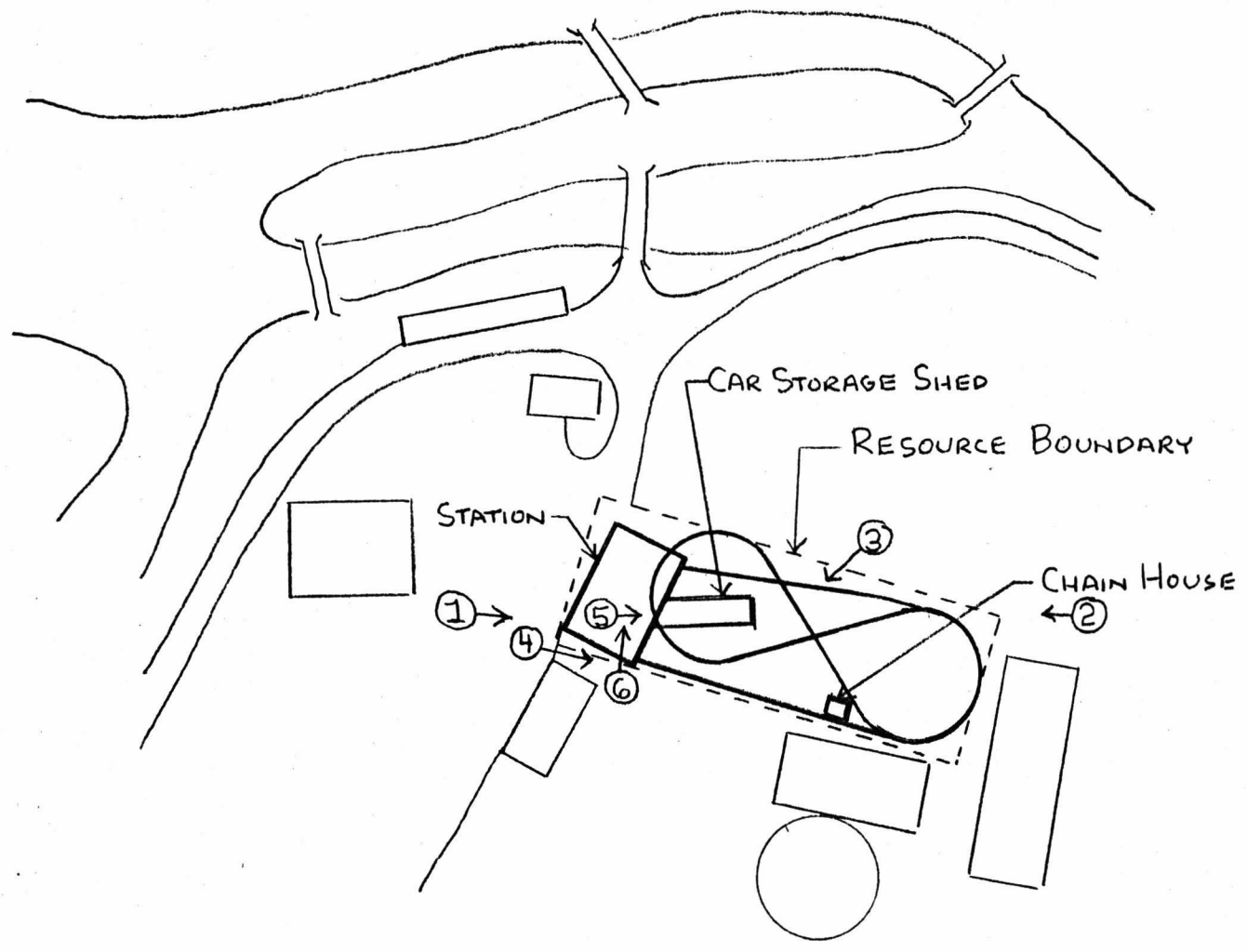
SCALE: 1"  $\approx$  100'



LOGAN BLVD (RT. 36)

U.S. 220

NORTH



Leap-the-Dips  
PENNSYLVANIA, Blair

The Leap-the-Dips roller coaster has had minimal alteration since its period of original construction, maintaining all of its key original elements. The resource consists of the track and trestle (fully intact, operational through 1985, and in process of being restored to service), a station pavilion, a small shed housing the chain motor, a small storage shed housing the cars, and eight individual two-seat cars.

Reviewer; Marilyn M. Harper  
Discipline: Historian  
Date: March 26, 1991

United States Department of the Interior  
National Park Service

# National Register of Historic Places Continuation Sheet

Section number \_\_\_\_\_ Page \_\_\_\_\_

### SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 91000229

Date Listed: 3/15/91

Leap-the-Dips  
Property Name

Blair  
County

PENNSYLVANIA  
State

#### Multiple Name

-----  
This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

*Patricia Andrews*  
\_\_\_\_\_  
for Signature of the Keeper

3/19/91  
\_\_\_\_\_  
Date of Action

#### Amended Items in Nomination:

Section No. 3. The nomination was amended to show 4 contributing structures (the roller coaster itself, the station pavilion, the chain motor shed, and the car storage shed) and 8 contributing objects (the 8 cars).

Section No. 8. The nomination was also amended to show Period of Significance of 1902-1940.

The amendments were confirmed by phone with Bill Sisson of the Pennsylvania SHPO (3/19/91).

#### DISTRIBUTION:

National Register property file  
Nominating Authority (without nomination attachment)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES  
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Leap-the-Dips  
NAME:

MULTIPLE  
NAME:

STATE & COUNTY: PENNSYLVANIA, Blair

DATE RECEIVED: 1/29/91 DATE OF PENDING LIST: 2/12/91  
DATE OF 16TH DAY: 2/28/91 DATE OF 45TH DAY: 3/15/91  
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 91000229

NOMINATOR: STATE

REASONS FOR REVIEW:

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

COMMENT WAIVER: N

ACCEPT  RETURN  REJECT 3/15/91 DATE

ABSTRACT/SUMMARY COMMENTS:

This 1902 roller coaster is thought to be the  
oldest standing roller coaster in the world & the  
only remaining example of its type - a side-  
friction, figure 8 design

RECOM./CRITERIA Accept/AdC  
REVIEWER Harper  
DISCIPLINE Historian  
DATE 3/15/91

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

---

CLASSIFICATION

count       resource type

---

STATE/FEDERAL AGENCY CERTIFICATION

---

FUNCTION

historic       current

---

DESCRIPTION

architectural classification  
 materials  
 descriptive text

---

SIGNIFICANCE

Period      Areas of Significance--Check and justify below

Specific dates      Builder/Architect  
Statement of Significance (in one paragraph)

summary paragraph  
 completeness  
 clarity  
 applicable criteria  
 justification of areas checked  
 relating significance to the resource  
 context  
 relationship of integrity to significance  
 justification of exception  
 other

---

BIBLIOGRAPHY

---

GEOGRAPHICAL DATA

acreage       verbal boundary description  
 UTM's       boundary justification

---

ACCOMPANYING DOCUMENTATION/PRESENTATION

sketch maps     USGS maps     photographs     presentation

---

OTHER COMMENTS

Questions concerning this nomination may be directed to

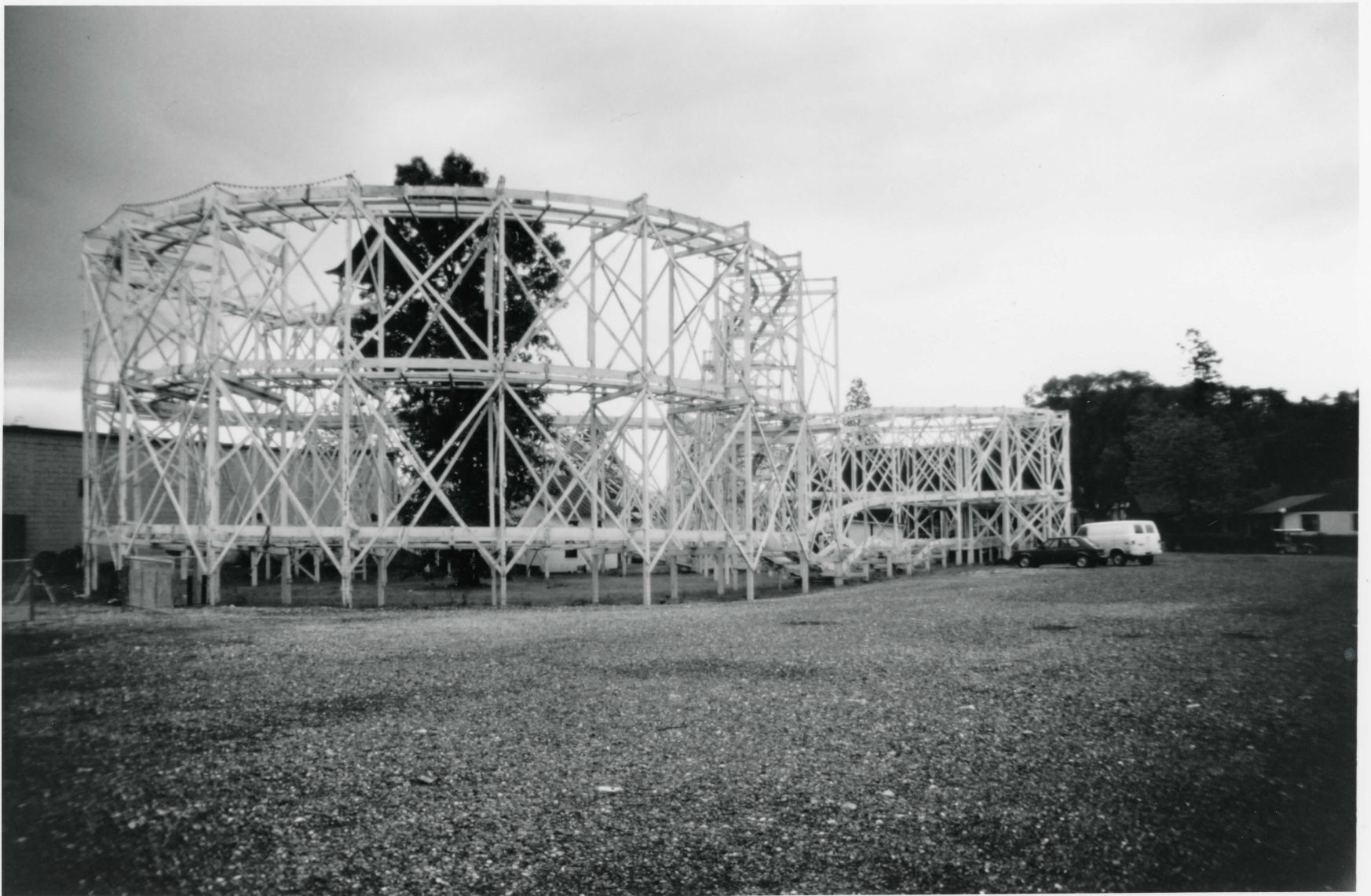
\_\_\_\_\_ Phone \_\_\_\_\_

Signed \_\_\_\_\_ Date \_\_\_\_\_



LEAP THE DIPS  
PHOTO NO. 1

Blair CPA



LEAP THE DIPS  
PHOTO NO. 2

*Blair CPA*



LEAD THE DIPS  
PHOTO NO. 3

*Blair C.P.A.*



LEAP THE DIPS  
PHOTO NO. 4

*Blair Co PA*



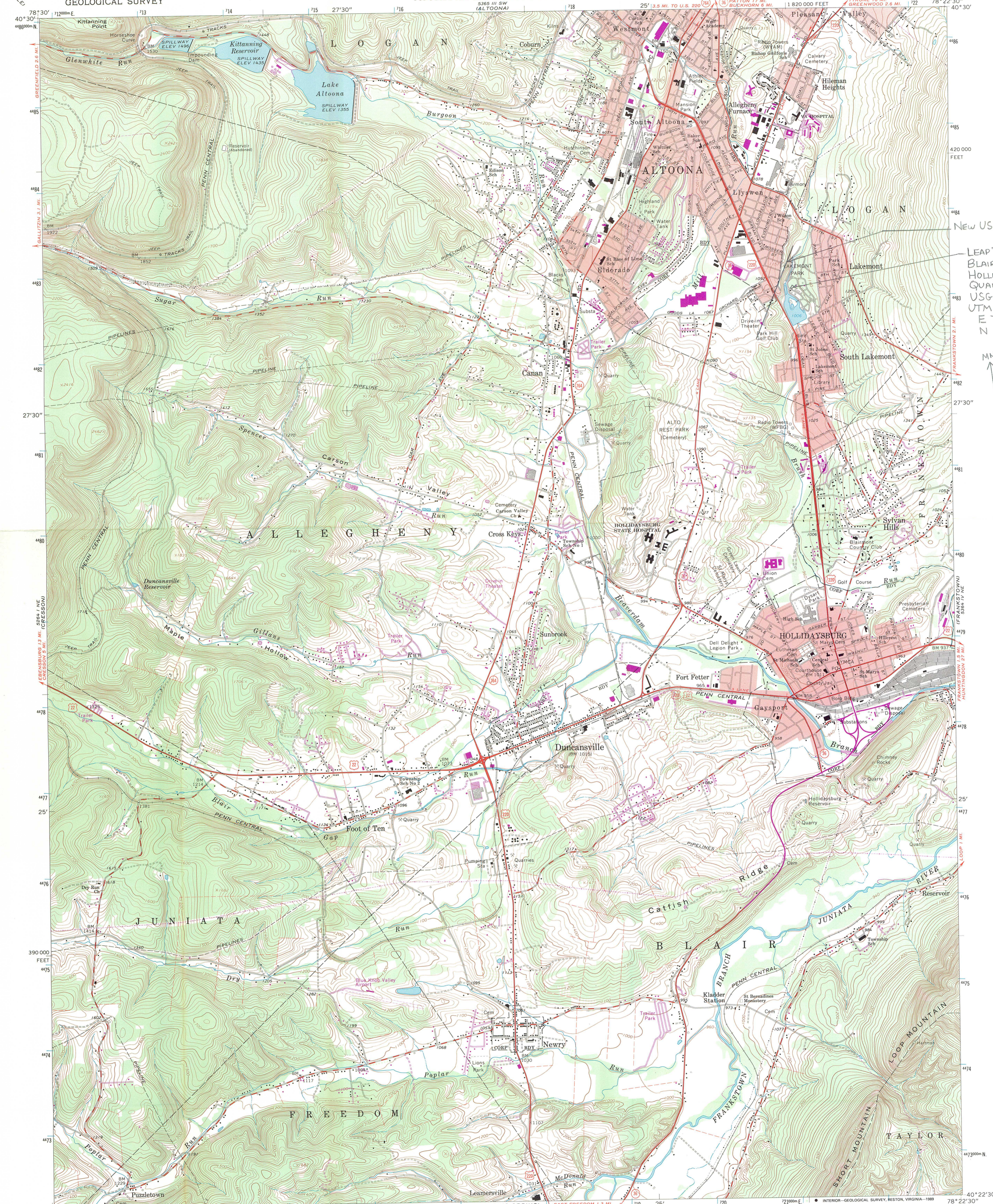
LEAP THE DIPS  
PHOTO NO. 5

*Blair CPA*



LEAD THE DIPS  
PHOTO NO. 6

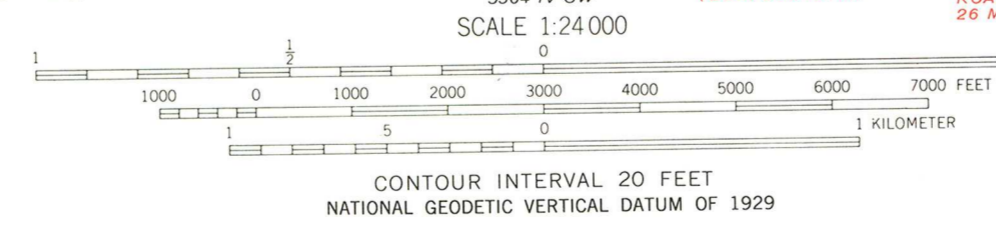
*Blair ce PA*



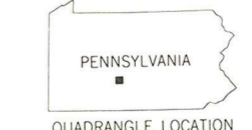
LEAP THE DIPS  
BLAIR COUNTY  
HOLLIDAYSBURG  
QUADRANGLE  
USGS ZONE 17  
UTM REF NOS:  
E 720710  
N 4483060

MN

Mapped, edited, and published by the Geological Survey  
Control by USGS and USC&GS  
Topography by photogrammetric methods from aerial photographs taken 1962. Field checked 1963  
Polyconic projection. 1927 North American datum  
10,000-foot grid based on Pennsylvania coordinate system, south zone  
1000-meter Universal Transverse Mercator grid ticks, zone 17, shown in blue  
Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked  
Red tint indicates areas in which only landmark buildings are shown to place on the predicted North American Datum 1983, move the projection lines 5 meters south and 22 meters west as shown by dashed corner ticks



ROAD CLASSIFICATION  
Heavy-duty — Light-duty  
Medium-duty — Unimproved dirt  
U.S. Route — State Route

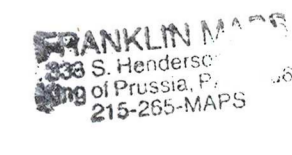


HOLLIDAYSBURG, PA.

40078-D4-TF-024  
PHOTOINSPECTED 1981  
PHOTOREVISED 1972  
DMA 5364 IV NW—SERIES V831

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

Revisions shown in purple compiled in cooperation with State of Pennsylvania agencies from aerial photographs taken 1972. This information not field checked



Dave  
BHP

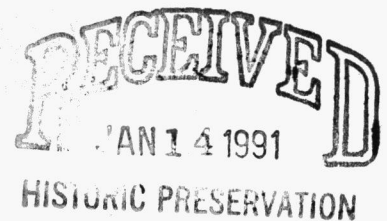
**COUNTY of BLAIR**  
**OFFICE OF THE COMMISSIONERS**

**COURT HOUSE**  
**HOLLIDAYSBURG, PENNSYLVANIA 16648**  
**TELEPHONE (814) 695-5541**

**WILLIAM C. STOUFFER**  
President  
**JOHN J. EBERSOLE**  
Vice-President  
**DONNA D. GORITY**  
Secretary  
**RALPH TOM MANGUS**  
Chief Clerk  
**MERLE K. EVEY**  
Solicitor

December 27, 1990

Mr. Brent D. Glass  
Pennsylvania Historical and Museum Commission  
P. O. Box 1026  
Harrisburg, Pennsylvania 17108-1026



Dear Mr. Glass:

We encourage you to grant designation as a National Historic Site to the "Leap The Dips" located at Lakemont Park, Altoona, Blair County, PA. From all available information, the "Leap The Dips" is the oldest standing roller coaster in the world of this design. The "Leap The Dips" is a side friction coaster of the Figure 8 design and was built in 1902. The Figure 8 was a standard fixture in parks across the United States and Europe during the first two decades of the twentieth century. Following WWI these side frictions were replaced by the newly developed under friction system.

At present, there are only two side frictions existing in North America, and it is believed, the world. One of these survivors is no longer standing but the "Leap The Dips" in Lakemont Park is entirely intact.

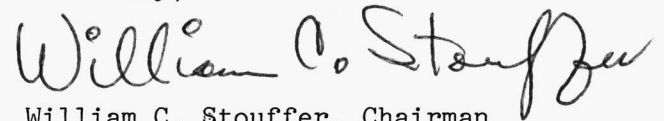
The American Coaster Enthusiasts, a non-profit organization, has declared the "Leap The Dips" the oldest standing roller coaster in the world and the last remaining example of the side friction figure 8.

We believe the "Leap The Dips", as the sole surviving representative of a very important period in history and of the roller coaster and outdoor amusement industry, is very significant and must be preserved for future generations.

Your consideration for the preservation of this extremely important example of early twentieth century history will be greatly appreciated, not only by the people of Blair County, but by all people committed to the preservation of our past.

Thank you very much for your cooperation in this matter.

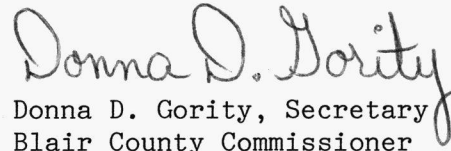
Sincerely,



William C. Stouffer, Chairman  
Blair County Commissioner



John J. Ebersole, Vice Chairman  
Blair County Commissioner



Donna D. Gority, Secretary  
Blair County Commissioner

**RECEIVED**

JAN 14 1991

PH & MC  
EXECUTIVE DIVISION



**COMMONWEALTH OF PENNSYLVANIA**  
**PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION**  
**BUREAU FOR HISTORIC PRESERVATION**  
**BOX 1026**  
**HARRISBURG, PENNSYLVANIA 17108-1026**

1991

**NATIONAL REGISTER**

January 23, 1991

Carol Shull, Chief of Registration  
National Register of Historic Places  
U.S. Department of Interior  
1100 L Street, NW  
Washington, D.C. 20240

Re: NR nomination forms

*Carol*  
Dear Ms. Shull:

The following National Register nomination forms are being submitted for your review:

Hopewell Historic District, Chester County  
Carson College for Orphan Girls, Montgomery County  
Adam Fisher Homestead, Westmoreland County  
Leap the Dips, Blair County  
Spruce Creek Rod & Gun Club, Huntingdon County

The proposed action is :

listing in the National Register

determination of eligibility (owner objection)

If you have any questions regarding the nominations please call us at (717) 783-8947.

Sincerely,

Dan G. Deibler, Chief  
Division of Preservation Services

Enclosures  
DGD/dc



United States Department of the Interior



NATIONAL PARK SERVICE

P.O. BOX 37127

WASHINGTON, D.C. 20013-7127

IN REPLY REFER TO:

APR 1 1991

H32(413)

To: Chief Historian, History Division

From: Chief of Registration, National Register of Historic Places

Re: Property for potential National Historic Landmark designation

Attached is a copy of a nomination for a property recently listed in the National Register with a recommended national level of significance. It is the opinion of the National Register that this property may have potential for National Historic Landmark designation. We are forwarding it to you for your review and consideration.

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
Interagency Resources Division  
National Register of Historic Places

Evaluation of Potential National Significance

Property Name: Leap-the-Dips

State and County: PENNSYLVANIA, Blair

Applicable NHL Criteria and/or Exception: Criteria 1 and 4

Applicable NHL Theme, Subtheme, and Facet: Theme XVIII. Technology, Subtheme H. Construction and Theme XXXIV. Recreation, Subtheme B. Spectator Sports, Facet 2. Roller Coasters.

Explanation of Potential National Significance:

Leap-the-Dips is the oldest standing roller coaster in the world and the last surviving example of a Figure Eight Side Friction coaster.

The Leap-the-Dips Roller Coaster was constructed in 1902 in Lakemont Park, one of the many amusement parks constructed by urban rapid transit companies during the 1890s. It consisted of a wooden figure eight track mounted on a wood trestle. The track was formed by two sets of tracks forming what appeared to be a shallow trough; a pair of flat longitudinal treads supporting the unflanged load-bearing wheels, and a second set of flat boards positioned vertically on each side of the track which were contacted by separate non-flanged friction guide wheels mounted vertically on the sides of the cars. These friction boards acted to prevent possible derailment and permitted higher speeds. The highest point on the coaster is only 41 feet above the ground, but the figure eight configuration doubles back on itself, forming a multilayered interlocking track layout.

The Side Friction roller coaster was one of the two alternative forms dominating roller coaster technology following the introduction of the first commercial coaster at Coney Island in 1884 (the other was the slower and less exciting Scenic Railway). The Figure Eight form of the side friction roller coaster was patented by E. Joy Morris in 1894 and marketed by his company. Hundreds of these designs were constructed in the United States and Europe during the first two decades of the Twentieth Century, before they were replaced with still more exciting technology. The Leap-the-Dips is the sole surviving example.



# United States Department of the Interior

NATIONAL PARK SERVICE

P.O. BOX 37127

WASHINGTON, D.C. 20013-7127



IN REPLY REFER TO:  
H34(418)

MAY 16 1991

Memorandum

To: Chief of Registration

From: Senior Historian, History Division

Subject: Leap-The-Dips Side-Friction Roller Coaster, Lakemont Park:  
National Historic Landmark Potential

The subject National Register form is one of those you submitted to us for review, based on a fine evaluation by your staff. This case is a fine example of how the continuing work of the States can yield properties worthy of consideration for National Historic Landmark designation that might not otherwise come to our attention. Your staff is to be commended for referring this property to us.

The analysis in the statement of significance is persuasive. Leap-The-Dips, if its integrity is as "whole" as claimed in the nomination, is an extraordinary survivor and a strong candidate for designation. It is the counterpart of the two primitive carousels that were nominated along with the more elaborate and artistic examples of the second generation of them. Currently, for roller coasters, we have only second-generation examples.

We are suggesting that the nomination be strengthened by adding sections on the E. Joy Morris Co. and a more thorough discussion of integrity. The source for the statement that Leap-The-Dips is the only surviving side-friction roller coaster in the United States also needs to be specified.

The prime difficulty with the integrity of properties of this type is in discerning whether they are largely intact or whether they are artificial combinations of parts rebuilt or cannibalized over time from other machines. For example, many coasters experienced fires and were partially rebuilt. It is, therefore, critically important to determine just how much of this coaster consists of rebuilt or replacement parts, and when the seemingly minor changes alluded to in the form were made.

A word of explanation. This property was not picked up in the recreation theme study because the SHPO and even the American Coaster Enthusiasts representative who met with my staff were apparently unaware of its unique characteristics and survival. We had accordingly concluded that "side-friction" coasters were an extinct species. Even locals who wrote to us some 5 years ago about the park were apparently not aware of the importance of the coaster, as opposed to the park as a whole, and did not call it to our attention.

Because we do not anticipate being able to schedule staff revision of this study in the short term, we are writing to the SHPO to determine if his office or the volunteer who prepared the form will be willing to undertake the necessary revisions to finalize this study for presentation to the National Park System Advisory Board.

Please share this memorandum with Historian Andrus since it reflects favorably on his work.

*Ben Levy*



# United States Department of the Interior

NATIONAL PARK SERVICE

P.O. BOX 37127

WASHINGTON, D.C. 20013-7127



IN REPLY REFER TO:

H34(418)

MAY 20 1991

Dr. Brent D. Glass  
State Historic Preservation Officer  
Pennsylvania Historical and Museum Commission  
P.O. Box 1026  
Harrisburg, PA 17108-1026

Dear Dr. Glass:

The staff of the National Historic Landmarks Survey has recently reviewed the National Register nomination study of the Leap-The-Dips Side-Friction Roller Coaster, in Lakemont Park, in Altoona. We are favorably persuaded by the case for the property's national significance presented in the form. It appears to be a happy discovery.

Certain additional work, however, is necessary to put this study into final form for consideration for Landmark designation by the National Park System Advisory Board. Because we do not anticipate being able to schedule staff revision of this study in the near future, I wish to determine whether your office is able to do so or whether you believe that we could prevail upon the author of the form, Mr. Tom Halterman, of the American Coaster Enthusiasts, to do so. The advantage is that this course of action could permit more timely consideration of the property for designation.

Leap-The-Dips, if its integrity is as claimed in the nomination, is an extraordinary survivor and a strong candidate for Landmark designation. The only roller coasters that have been designated are more elaborate "second-generation" examples, for we had concluded that "side-friction" coasters were an extinct species.

We suggest that the nomination be strengthened by adding sections on the history of the E. Joy Morris Co., a more elaborate discussion of the coaster's integrity, and the source of the statement that the coaster is the only side-friction coaster extant in the United States. Regarding integrity, although the form is somewhat reassuring, the history of coasters generally involved much rebuilding after fires and cannibalizing of parts from others. It is, therefore, critically important to be certain just how much of this coaster consists of rebuilt or replacement parts and when the seemingly minor changes alluded to in the form were made.

I believe that this example points out, in an exceptional way, the manner in which the National Register and National Historic Landmark processes can work in tandem, because it is the National Register nomination that has brought this important candidate to light. A check of our correspondence, from about 5 years ago, reveals that local people in Altoona, who wrote to us regarding the preservation of Lakemont Park, were apparently not then aware of the exceptional importance of the coaster.

We are appreciative of your continued interest in the National Historic Landmarks Program and the exceptional efforts of the staff of your office in that regard. If you or your staff wish to discuss this matter, please contact Jim Charleton of the History Division staff at (202)-343-3793.

Please also feel free to share this letter with Mr. Halterman.

Sincerely,

**Benjamin Levy**

Benjamin Levy, Manager  
National Historic Landmarks Survey  
History Division

cc: 001

400

413 Shull

418 LEAP THE DIPS (OSC)

418 Levy

418 Milner

418 Charleton

MARO (Gurney)

JHCharleton:mg:5/15/91  
Charleton disk, item 4

Leap - The - Dips

91000229

10 / 26 / 2015

(Resource Name)

(Reference Number[s])

(Date form completed)

Blair

PA

WACC

(County)

(State)

(Completed by)

STATUS:

1. MISSING \_\_\_ 2. REMOVED/ DEMOLISHED \_\_\_ 3. NHL  4. TR \_\_\_ 5. MRA \_\_\_ 6. OVER-SIZED \_\_\_ 7. NPS - UNDOCUMENTED \_\_\_ 8. DOE - OWNER OBJECTION \_\_\_ 9. RESTRICTED \_\_\_

EXPLANATION:

1. Missing Status: Entire Folder ( ) ; Nomination ( ) ; Map(s) ( ) ; Photos ( )  
Available on: Microfiche ( ) ; Optical Disk ( )

2. \_\_\_\_\_  
(Cause for removal)

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
(Date Removed)

3. \_\_\_\_\_  
(NHL Name, if different than NRHP Name)

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(Date Designated)

4. \_\_\_\_\_  
(If multi-state/county TR, state/county where filed and location)

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(TR or MRA Name)

5. \_\_\_\_\_  
(If multi-state/county MRA, state/county where filed and location)

6. \_\_\_\_\_  
(Location of oversize file)

7. \_\_\_\_\_  
(Current source of partial documentation)

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(Target Date)

COMMENTS:

\_\_\_\_\_  
(Where found, or source of replacement)

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(Date Found/Replaced)