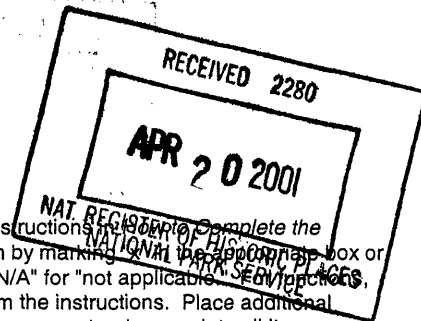


United States Department of the Interior
National Park Service

National Register Of Historic Places
Registration Form

522

8



This form is for use in nominating or requesting determinations for individual properties and districts. See instructions on the back of the form. Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." 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 Camera Obscura

other names/site number _____

2. Location

street & number 1096 Point Lobos Avenue NA ☐ not for publication

city or town San Francisco NA ☐ vicinity

state California code CA county San Francisco code 075 zip code 94121

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, 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. I recommend that this property be considered significant ☐ nationally ☐ statewide ☒ locally. (☐ See continuation sheet for additional comments.)

Challenger Stinson
Signature of certifying official/Title

APR 20 2001
Date

National Park Service

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.)

K. Mellen
Signature of commenting or other official

2/21/01
Date

California Office of Historic Preservation

State or Federal agency and bureau

4. 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 the Keeper

Date of Action

5/23/01

Camera Obscura

Name of Property

San Francisco County, CA

County and State

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(s)
☐ district
☐ site
☐ structure
☒ object

Number of Resources within Property

(Do not include previously listed resources in the count.)

Contributing	Noncontributing	buildings
1		sites
		structures
1		objects
2	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)

Recreation and Culture

Current Functions

(Enter categories from instructions)

Recreation and Culture

7. Description**Architectural Classification**

(Enter categories from instructions)

no style

Materials

(Enter categories from instructions)

foundation **concrete**
roof
walls **wood**

other

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 contributions 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.)

- ☐ a owned by a religious institution or used for religious purposes.
- ☐ b removed from its original location.
- ☐ c a birthplace or a 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)

ENGINEERING

Period of Significance 1946

Significant Dates 1946 constructed; 1957 exterior remodeled

Significant Person (Complete if Criterion B is marked above) _____

Cultural Affiliation N/A

Architect/Builder Floyd Jennings (Builder)

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

=====

9. Major Bibliographical References

=====

(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: Golden Gate National Recreation Area

=====

10. Geographical Data

=====

Acreage of Property less than one acre

UTM References (Place additional UTM references on a continuation sheet)

Zone 10 Easting 542 895 Northing 418 1148

X 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 Denise Bradley
organization _____ date 23 October 2000
street & number 1965 Page Street, # 202 telephone 415-751-2604
city or town San Francisco state CA zip code 94117

=====

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 the SHPO or FPO.)

name Robert Tacchetto
street & number 1096 Point Lobos Avenue telephone 415-751-0415
city or town San Francisco state CA zip code 94121

=====

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 the 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 Project (1024-0018), Washington, DC 20503.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7

Camera Obscura Page 1

DESCRIPTION

The Camera Obscura is located on a lower terrace behind the Cliff House. The Camera Obscura consists of the components of the camera obscura — projection table, lens, and mirror — housed in a small building. The lens of the camera obscura, driven by a small motor, rotates for 360 degrees in a clockwise direction. The rotation takes approximately six minutes and provides panoramic views of the Pacific Ocean, Seal Rocks, Fisherman's Rock, Ocean Beach, Point Lobos, and Marin coastline. The Camera Obscura is open everyday, weather permitting, from 11:00 a.m. to sunset.

CAMERA OBSCURA: PROJECTION TABLE, LENS, and MIRROR

A 1980 National Register of Historic Places Registration Form (Delgado and Christopher 1980) provided the following description of the Camera Obscura's projection table, lens, and mirror, which have remained unchanged since their installation in 1946:

CAMERA OBSCURA APPARATUS

Projection Table

The projection table of the camera obscura, which is mounted inside the housing, is a circular parabolic dish made of shaped plywood surfaced with white enamel. The dish is mounted on a metal frame made of approximately one inch diameter metal tubing, which is anchored to the concrete floor. A single metal rod, which stabilizes the dish, penetrates the floor and is anchored to the native rock of the site. The image captured by the mirror and lens 150 inches above is projected onto this table, which is slightly tilted to the northeast for the best image clarity. This projection table has not been altered since its 1946 construction.

Lens

The 150 inch lens, which is mounted at the bottom of the metal hood of the roof, is of an undetermined age. It appears to part of a telescope, with a brass mounting. The glue which holds the lens in the brass mount is deteriorating. The lens is thought to have been manufactured by the Clark Lens Company of Cambridge, Massachusetts. There is no visible identifying mark on the lens or the brass mount; the lens identification therefore cannot possibly be corroborated unless the lens is removed for examination. The Clark Lens Company has been a manufacture of high quality lenses for many years.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7

Camera Obscura Page 2

Mirror

The rear coated mirror, which is mounted above the lens at a slight angle, is mounted in what appears to be a brass porthole from a ship. There are no identifying marks. (ibid., Section 7, pages 2-3)

CAMERA OBSCURA: BUILDING

The building that houses the camera obscura provides a dark enclosure within which to view the images that the lens and mirror project onto the projection table. As built in 1946, the building that housed the camera obscura was approximately 17.5 feet by 17.5 feet. The 1980 National Register of Historic Places Registration Form described the original appearance of this building:

CAMERA HOUSING (1946 APPEARANCE)

As originally built in 1946, the structure housing the camera obscura was a square wood frame structure... with horizontal redwood tongue-in-groove siding. The building rested upon a six inch thick concrete pad, with exposed concrete foundations about fourteen inches high. The framed walls rested upon the foundations. There was no fenestration; there were three doors. The main entrance was on the east facade. Visitors would enter through an arched opening to one side of the glassed ticket booth and pass through a small hallway leading to the door allowing access to the interior. A pair of double acting doors on the south facade served as the exit, while a door on the west facade serve as the emergency exit and also provided access to the external wooden stairway providing access to the roof.

The roof was flat, finished with rolled mineral surface composition paper. Surmounting the roof was a small wooden railing, with circular posts, that followed the roof line. On the center of the roof was a circular wooden housing for the camera obscura lens and mirror. This structure, which was approximately three feet in diameter, had vertical wood siding. Atop it was a metal hood which rotated, allowing the camera obscura lens and mirror to capture the outside view. The lens and mirror were mounted in the hood, which was turned with an electric motor.

The color of the structure varied from an off-white to a brilliant yellow. At one time three ornamental "tube" like appendages protruded from the circular housing to give it

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7

Camera Obscura Page 3

the appearance of a ship's capstan for a "nautical" theme. The tubes were painted an aluminum color. The interior of the structure is thought to have remain unaltered, with plasterboard walls, painted black, a ceiling, also painted black, and two bare light bulbs providing emergency illumination in the dark interior. Two small storage closets, in the northwest and southwest corners, and the doors on the east wall providing access and exit were also in place in 1946. (ibid., Section 7, page 1)

In 1957, the exterior of the building was remodeled to resemble a "giant camera." The 1980 National Register of Historic Places Registration Form described the appearance of the building following this remodeling:

CAMERA HOUSING (1957 APPEARANCE)

In or around 1957, the external appearance of the camera obscura housing was altered to resemble a "giant camera" following the wishes of [then] Cliff House owner George K. Whitney, Sr. [who also owned the nearby amusement park, Playland at the Beach]. The adaptations were simple; they did, however, completely alter the appearance of the structure. The exterior walls were sheathed in plywood, and two false walls, extending the dimensions of the building by five feet on the north and south facades, were added.¹ These additions taper off at the roof line and the ground. On the east facade, two decorative wooden knobs were added to simulate the knobs used to advance the film on cameras of that period. Only the west facade, which is not accessible to the public, was left unaltered.

The railing on the roof was removed, the circular housing was sheathed to give it a smooth appearance and a circular band, approximately nine inches wide, was built of plywood to encircle part of the housing where the tubes were located. The metal hood was unaltered. The color scheme of the building at that time was bright yellow, with raised wooden letters spelling "camera obscura" painted in metallic silver and black. The interior, as explained earlier, was not modified. (ibid., Section 7, page 2)

¹ The false walls were added onto the north and south facades, so that the measurements of the east and west facades were each increased by approximately 5 feet (by 2.5 feet on the north end and 2.5 feet on the south end). This can be seen in photograph 10 that shows the roof of the building and the building's original configuration and in photograph 6 that shows the west facade, which is the only original facade, with the addition of the false wall onto the south facade.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7

Camera Obscura Page 4

=====

The remodeling was placed over the original redwood tongue-in-groove siding; the original materials remain in place under the 1957 facade.

In 1980, Chris Monterey, who with Dave Warren operated the Camera Obscura for its owner Gene Turtle from 1978-1993, replaced the original exterior hood that covers the lens and mirror with a copper-sheathed pyramid-shaped cover. (Roop 2000)

At some time, after 1980, a new sign panel was placed over the original sign on the front (east) facade. The new sign reads "CAMERA OBSCURA AND HOLOGRAPH GALLERY". The holograph gallery, referred to in the sign, consists of framed holographs that are hung on the south, west, and north interior walls and was added ca. 1979. The original sign, with copper letters, remains underneath the current sign. (Tacchetto 2000)

In the early 1990s, the exterior doors on the front (east) facade, that enclosed the recessed entryway, were removed. They were replaced with doors that were flush with the front facade. (This change was to discourage vandalism.) The replacement doors consisted of two doors each consisting of two hinged panels (total of four panels). Two of these four panels were obtained from the Embassy Theater, which had removed the doors during remodeling. (Warren 2000)

Today, other than these changes (replacement of doors and exterior hood and addition of new sign on east facade), the appearance of exterior appearance of the building remains largely as remodeled in 1957. The exterior is painted a pale yellow or cream color. The detailing including the two "camera knobs" on the east facade, railings on the south, east, and north facades, and "GIANT CAMERA" lettering on the south side are painted black. The exterior footprint of the building measures approximately 17.5 feet (on the north and south facades) by 22 feet (on the east and west facades).

To enter the Camera Obscura, visitors purchase a ticket from the ticket booth, located just inside the doors on the east facade; turn to the right (north) and then proceed through a short hallway that leads to a set of double doors, located on the north side of the east interior wall; these doors lead to the interior room that contains the projection table. The 6-foot parabolic projection table is located centrally in the room, so that visitors can walk around all sides. The interior room remains unchanged; it is still painted black, to darken the room and enhance the clarity of the

NPS Form 10-900-a
(10-90)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7

Camera Obscura Page 5

=====

images. Visitors exit through a set of double doors, located on the south side of the east interior wall. They proceed through a short hallway to the exit on the east end of the south facade.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 8

Camera Obscura Page 6

HISTORIC CONTEXTS

The following historic contexts provide an overview history of the development of the camera obscura as a photographic device, history of camera obscuras in San Francisco, and specific history of the Camera Obscura that is the subject of this form.

HISTORY OF THE DEVELOPMENT OF CAMERA OBSCURAS

The invention of the camera obscura was the first of many steps that would ultimately culminate in the development of the photographic process. The origins of the camera obscura have been traced to the 10th Century, when an Arab mathematician, Alhazen or Basra, recorded the “natural phenomenon of the inverted image...he had observed this on the white walls of darkened rooms...the image passing through a small round hole in the wall, tent flap, or drapery.” Alhazen used this principle, that of the camera obscura, to view eclipses of the sun which he knew to be harmful to the naked eye.

There were, however, problems with the early camera obscuras. First, they were too large to be moved, being, after all, a room; the second, the projected image lacked brilliance and clarity. (Hence the name camera obscura) The second problem would not be solved until 1550, when Italian Physician Girolama Cardano placed a convex lens in the hole, clarifying the image. A remaining problem was that the image was seen best when standing on one’s head as the image was both upside down and reversed. In 1558, Italian playwright Giovanni Battista della Porta placed a convex mirror in the camera obscura so that “the image would be enlarged and reflected back onto the wall inside the room, unreversed.” Thus, as early as 1558, the general principles of the camera obscura device were established.

Previous works and writings had discussed the camera obscura, notably those of Leonardo da Vinci, who gave a “clear and concise” description of an early prototype of the camera obscura in his notebooks. Leonardo, however, did not invent the camera obscura; his drawings remained a secret and the mirror writing in his notebooks was not deciphered until 1797, when the camera obscura was well in use throughout the world.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 8

Camera Obscura Page 7

=====

The problem of size was tackled in the 17th Century, when the first portable camera obscuras were sedan chairs and tents. Around 1685, more portable camera obscura were devised, being "about two feet in length, less than a foot in height, with a lens fitted at one of the long ends and a ground glass on the other." The 17th and 18th Centuries saw increased use of the camera obscura, particularly by artists, who utilized the camera obscura images to trace outlines for paintings and drawings, hence "obscuring an artist's incompetence in perspective or catching a likeness.

Subsequent inventions and experiments with chemical salts culminated, in the early 19th Century, with the invention of the modern photographic process and camera. The camera obscura, despite this, remained a popular and fascinating toy. During the Victorian era, large camera obscura were placed on fashionable estates, usually housed in a gazebo with a magnificent view. Their use was not confined to Europe, American estates also contained camera obscuras. (Delgado and Christopher 1980, Section 8, pages 1-2)

CAMERA OBSCURAS IN SAN FRANCISCO

Documentation of the 19th Century use of camera obscuras in San Francisco is sparse. A camera obscura was placed and used on the grounds of Woodward's Gardens, a popular San Francisco attraction of the 1860s, 1870s, and 1880s. (ibid., Section 8, page 2)

A contemporary description of the second Cliff House, built in 1896 by Adolph Sutro, stated that there was a camera obscura on the fourth floor and that it was "the largest camera obscura west of Chicago" (in Bradley et.al. 1999, page 117). This camera obscura would have been destroyed in the fire that consumed the second Cliff House in 1907.

THE JENNINGS' CAMERA OBSCURA

The third and current Cliff House was built in 1909 to replace the building that had burned, and destroyed its on-site camera obscura, in 1907. The Cliff House had been closed between 1925 and 1937, in 1937, George K. Whitney Sr., a San Francisco, reopened it.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 8

Camera Obscura Page 8

Whitney was approached with the idea of placing a camera obscura behind the Cliff House, facing the sea, by businessman Floyd Jennings, who had been fascinated with the concept of the camera obscura since reading an encyclopedia description of the device. Experimenting at home, Jennings built a crude, modern device that worked. Whitney liked the idea and approved the construction of Jennings's [sic] camera obscura at the Cliff House. (ibid., Section 8, pages 2-3)

Jennings' camera obscura was built and in place by 1946.² His unusual attraction caught the public fancy, and the camera obscura, housed in its distinctive building, has been in continuous operation since 1946 – or for fifty four years.

Jennings' camera obscura, which he called his "giant camera" attracted the attention of Life Magazine in 1954, when they published a feature pictorial article on the camera obscura. Life noted that the Cliff House camera obscura was built by Jennings as

...a tourist attraction on the cliff overlooking Seal Rocks Basically, his camera obscura is a 20x20-foot darkened room with a 150-inch focal length lens through which light from the outside scene enters to form a life-like image on a white topped table. The

² Jennings built a total of three camera obscuras: the first was the one in San Francisco (the subject of this form), the second opened in 1955 at the Garden of the Gods in Colorado Springs, Colorado, and the third was at Rock City Gardens in Chattanooga, Tennessee (this one was featured on the cover of *Life Magazine* on 25 April 1960). The camera obscura in Colorado Springs was torn down within the last decade (Lohse 2000). The camera obscura at Rock City was dismantled in the mid-1970s. It was given to Covenant College in Lookout Mountain, Tennessee, with the hope that it would be installed in the college's tower that has a 360 degree view from the top of Lookout Mountain; this did not happen, and this camera obscura's whereabouts are unknown (Chapin 2000).

The locations that Jennings chose to build his camera obscuras were similar in that they were all popular tourist areas. By choosing these locations, Jennings created a "popular camera obscura renaissance" while perpetuating the craft of building camera obscuras. By placing his camera obscuras in areas associated with recreational activities, Jennings continued the tradition of the association between these devices and recreation. (Durrance 2000)

The three camera obscuras that can be attributed to Floyd Jennings represent the largest documented group of camera obscuras built by an American in the 20th century. "He more than any other single individual brought camera obscuras into the 20th century in the United States" (ibid.)

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 8

Camera Obscura Page 9

effect is startling. When tourists step inside the room, they see an image six feet in diameter.

In 1964, Jennings's [sic] widow sold the camera obscura to Sausalito businessman Gene Turtle...Prior to the sale, in 1957, the camera's exterior appearance had been altered, at Whitney's suggestion, to better fit the theme of a "giant camera." ...The Cliff House was integrated into the Golden Gate National Recreation Area of the national Park Service in 1974. The camera obscura, being a privately owned building on Federal land, was then issued a permit to operate at the Cliff House... (ibid., Section 8, pages 2-3)

In 1978, David Warren, with the help of Chris DeMonterey, took over the day to day operation of the Camera Obscura from its owner Gene Turtle. (Evans 1987) In July 1993, Carl Tacchetto bought the Camera Obscura from Gene Turtle. Robert Tacchetto, son of Carl Tacchetto, has operated the Camera Obscura since 1995, following his father's death. (Tacchetto 2000).

SIGNIFICANCE

SIGNIFICANCE STATEMENT

The Camera Obscura is significant under Criterion C at the local level as a rare example of the camera obscura apparatus that is more than 50 years old and in its original location.

Camera obscuras were popular tourist attractions at seaside and scenic locations in the nineteenth and early twentieth centuries. They were also popular for their educational qualities. There have been at least three camera obscuras in San Francisco. There was one at Woodward's Gardens, a popular San Francisco attraction of the 1860s, 1870s, and 1880s. The second Cliff House (1896-1907) also contained a camera obscura on its fourth floor. This camera obscura would have been destroyed in the fire that burned the second Cliff House in 1907. The Camera Obscura built by Floyd Jennings in 1946 was the second camera obscura to be placed at the Cliff House site, a testament to the enduring fascination of the public with the scenic beauty of this spot.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 8

Camera Obscura Page 10

=====

The Camera Obscura in San Francisco is one of only two such optical instruments in California. The other one is located in Santa Monica and was moved in 1955 from its original location near the Santa Monica Pier to the Senior Recreational Center in Santa Monica.

The Camera Obscura in San Francisco appears to be the last example of a camera obscura in the United States that is contained in a free standing building and is older than 50 years of age. Other extant camera obscuras in the United States are less than 50 years old or if more than 50 years old have been moved from their original location.

PERIOD OF SIGNIFICANCE

The period of significance for the Camera Obscura under Criterion C is 1946, the year it was built.

INTEGRITY

The Camera Obscura retains its integrity of location, design, materials, workmanship, setting, feeling, and association.

Location

The Camera Obscura has since its construction in 1946 been located on the Lower Terrace of the Cliff House, and it continues to be located in there. This location allows the Camera Obscura to provide visitors views of the Pacific Ocean, Seal Rocks, Fisherman's Rock, Ocean Beach, Point Lobos, the Marin coastline, San Bruno Mountain, Montara Mountain, and portions of Golden Gate Park. Its placement on the westernmost space on the Lower Terrace of the Cliff House allows the camera obscura to provide views of all of these features as it rotates. The integrity of location is a key element of the Camera Obscura's significance in that it provides a continuity of experience — these same views have been enjoyed by all visitors to the Camera Obscura from 1946 to the present — within an area whose overall scenic quality is protected by the National Park Service.

Design

The Camera Obscura retains its integrity of design for the camera obscura machinery, for which the property is significant under Criterion C, since it retains its original projection table, lens, and mirror and continues to operate in the same manner as it did in 1946.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 8

Camera Obscura Page 11

=====

The exterior of the building, within which the camera obscura is housed, was remodeled in 1957. However, the original siding remains in place under the 1957 additions. In 1957, the building was remodeled to resemble a "giant camera" so that the building announced its function. At that time, the exterior walls were sheathed in plywood, and two false walls, extending the dimensions of the building by five feet on the north and south facades, were added. On the front (east) facade, two decorative wooden knobs were added to simulate the knobs used to advance the film on cameras of that period. Only the west facade, which is not accessible to the public, was left unaltered. (The original redwood siding is still visible on the west facade.) The signage on the south and west side that originally said "CAMERA OBSCURA" was changed to "GIANT CAMERA." This change in signage was consistent with the idea of having the building announce its function. The change in signage also provided the public with information on what was happening within the building (it is a giant camera) rather than the more obscure information of what it is (a camera obscura).

In 1980, Chris Monterey, who with Dave Warren operated the Camera Obscura for its owner Gene Turtle from 1978-1993, replaced the original exterior hood that covers the lens and mirror with a copper-sheathed pyramid-shaped cover. (Roop 2000)

In the early 1990s, the original exterior doors on the front (east) facade, that were recessed, were removed, and new doors were installed that are flush with the east wall.

At some time, after 1980, the original sign above the front doors (Camera Obscura) was covered over with a new sign; the original sign remains in place under the new sign. The sign currently reads "CAMERA OBSCURA AND HOLOGRAPH GALLERY." The holograph gallery, referred to in the sign, consists of small, framed holographs were hung on the south, west, and north walls inside of the building in ca. 1979. These holographs are a minor part of the exhibit and are subordinate to the experience of viewing the scenery on camera obscura's projection table.

The interior of this building remains unchanged since 1946.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 8

Camera Obscura Page 12

Because the Camera Obscura is significant under Criterion C as a rare example of the camera obscura machinery that is more than 50 years old and in its original location, the changes to the exterior facade of the building that houses this machinery does not lessen the integrity of design.

Issues related to the significance and integrity of the 1957 exterior renovations within the context of “duck” or “signature” architecture should be evaluated when these aspects of the Camera Obscura have reached 50 years of age.

Materials/Workmanship

The Camera Obscura retains its integrity of materials and workmanship for the camera obscura machinery, for which the property is significant under Criterion C, since it retains its original projection table, lens, and mirror, and they continue to operate in the same way as when installed in 1946.

Setting

The physical environment surrounding the Camera Obscura — its setting — has remained unchanged since 1946. The major aspects of its setting — the Cliff House, Pacific Ocean, Seal Rocks, Fisherman’s Rock, Ocean Beach, Point Lobos, and Marin coastline — remain in place. Because the major aspects of the setting remain unchanged, visitors today see very much the same things that visitors saw in 1946, when the Camera Obscura was built.

Feeling/Association

The Camera Obscura retains its integrity of feeling and association. These aspects of integrity are integrally linked to the experience of seeing and/or coming into contact with the natural and scenic features of the immediate area — the Pacific Ocean, Seal Rocks, Fisherman’s Rock, Ocean Beach, Point Lobos, and Marin coastline. Today, visitors have very much the same experience that visitors would have had in 1946, when the Camera Obscura was built.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 9

Camera Obscura Page 13

BIBLIOGRAPHY

Bradley, Denise, and Michael Corbett and Stephen A. Haller. 1999. "Draft National Register of Historic Places Inventory-Nomination Form: Sutro Historic Landscape District." Photocopy from the National Park Service: Golden Gate National Recreation Area Cultural Resources files.

Chapin, Bill (President, Rock City Inc.). 2000. Information on the Rock City, Tennessee camera obscura in email to Tom Roop and Joe Durrance. February 2000.

Colorado Springs Gazette Telegraph. 1955. "Garden of gods Camera Obscura Second in Country." 31 July 1955: Section B-3-3. Copy in email from Joyce Lohse, 28 October 2000.

Delgado, James P and R. Patrick Christopher. 1980. "Draft National Register of Historic Places Inventory-Nomination Form: Camera Obscura." 25 June 1980. Photocopy from the National Park Service: Golden Gate National Recreation Area Cultural Resources files.

Durrance, Joe. 2000. Comments on NRHP registration form. Emailed to Joe Roop, forwarded to Denise Bradley. 1 November 2000.

Evans, Karen. 1987. "Inside the Camera Obscura." *Image: The Magazine of Northern California, San Francisco Examiner*. 23 August 1987.

The Friends of the Giant Camera. 2000. *The Jennings' Giant Camera, San Francisco, CA: A Statement of Significance*. February 2000.

The Friends of the Giant Camera Website at <http://savethecamera.westphila.net>. For contemporary and historic photographs of the Camera Obscura.

Gustavson, Todd (Curator of Technology, George Eastman House). 2000. Email to Steve Haller, Park Historian GGNRA, on camera obscuras. 27 March 2000.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 9

Camera Obscura Page 14

=====

Life Magazine. 1954. "Speaking of Pictures: Camera Obscura Gives Spectacular Look to Familiar Sights off California Coast," *Life Magazine*, Vol. 36, No. 9, 1 March 1954.

Lohse, Joyce. 2000. Information on the camera obscura at the Garden of the Gods, Colorado Springs, Colorado in email to Tom Roop. 28 October 2000.

Roop, Tom (The Friends of the Giant Camera Committee). 2000. Email to Denise Bradley with information for the NRHP Registration Form. 1 November 2000.

Saturday Evening Post. 1950. "The Barnum of the Golden Gate," *Saturday Evening Post*, 20 May 1950.

Tacchetto, Robert (owner of Camera Obscura). 2000. Information provided to Denise Bradley. 21 October 2000.

Turtle, Gene E. 2000. Letter to Steve Haller, GGNRA Park Historian, concerning history of the Camera Obscura. 18 February 2000.

United States. Department of the Interior. National Park Service. Interagency Resources Division. 1991. *National Register Bulletin 15: Guidelines for Applying the National Register Criteria for Evaluation*. Washington, D.C.

_____. *National Register Bulletin 16A: How to Complete the National Registration Form*. Washington, D.C.

United States. Department of the Interior. National Register of Historic Places. Teaching With Historic Lesson Plans. 2000. "Roadside Attractions." Lesson plan on "duck" architecture from www.cr.nps.gov/nr/twhp.

United States Geological Survey. 1993. *San Francisco North, California Quadrangle*. 1:24,000.

Venturi, Robert, Denise Scott Brown, and Steven Izenour. 2000. Letter to Steve Haller, GGNRA Park Historian, concerning "duck" architecture and the Camera Obscura. 23 February 2000.

NPS Form 10-900-a
(10-90)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 10

Camera Obscura Page 15

=====

BOUNDARY DESCRIPTION AND JUSTIFICATION

The boundary of the Camera Obscura consists of the footprint of the building on the Lower Terrace of the Cliff House. This boundary corresponds to the original and only area within which the Camera Obscura has been located.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Photographs

Camera Obscura Page 16

=====

All photographs were taken by Denise Bradley on 21-22 October 2000. The original negatives are located at the Golden Gate National Recreation Area Park Archives and Record Center, National Park Service, Golden Gate National Recreation Area-Park Archives, Building 201, Fort Mason, San Francisco, California, 94123.

- Photo 1. View to northwest of Camera Obscura from Ocean Beach. Negative 1.
- Photo 2. View to south of Camera Obscura from Sutro Baths. Negative 15.
- Photo 3. Overview of Camera Obscura taken from Sutro Heights. View to west. Negative 17.
- Photo 4. View to northwest of Camera Obscura from walkway leading to Lower Terrace of Cliff House. Negative 4.
- Photo 5. View to northwest of Camera Obscura from walkway leading to Lower Terrace of Cliff House. Negative 3.
- Photo 6. Camera Obscura showing the west facade, with original siding, and south facade. View to Northwest. Negative 11.
- Photo 7. South facade of Camera Obscura, view to northwest. Negative 5.
- Photo 8. East facade of Camera Obscura with doors closed, view to southwest. Negative 12.
- Photo 9. East facade of Camera Obscura with doors open, view to southwest. Negative 8.
- Photo 10. Camera Obscura view to southwest. Negative 9.
- Photo 11. Ticket booth at Camera Obscura, view to southwest. Negative 6.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Photographs

Camera Obscura Page 17

=====

Photo 12. Detail of plaque, located on front door, at Camera Obscura that explains the operation of the camera obscura. Negative 7.

Photo 13. East (front) and north facades of Camera Obscura, view to south. Negative 14.

All copies of historic photographs were taken from the Golden Gate National Recreation Archives. The original negatives are located at the Golden Gate National Recreation Area Park Archives and Record Center, National Park Service, Golden Gate National Recreation Area-Park Archives, Building 201, Fort Mason, San Francisco, California, 94123.

Photo 14 View of Camera Obscura (1954), prior to 1957 remodeling.

Photo 15 View of the interior of the Camera Obscura (1954).

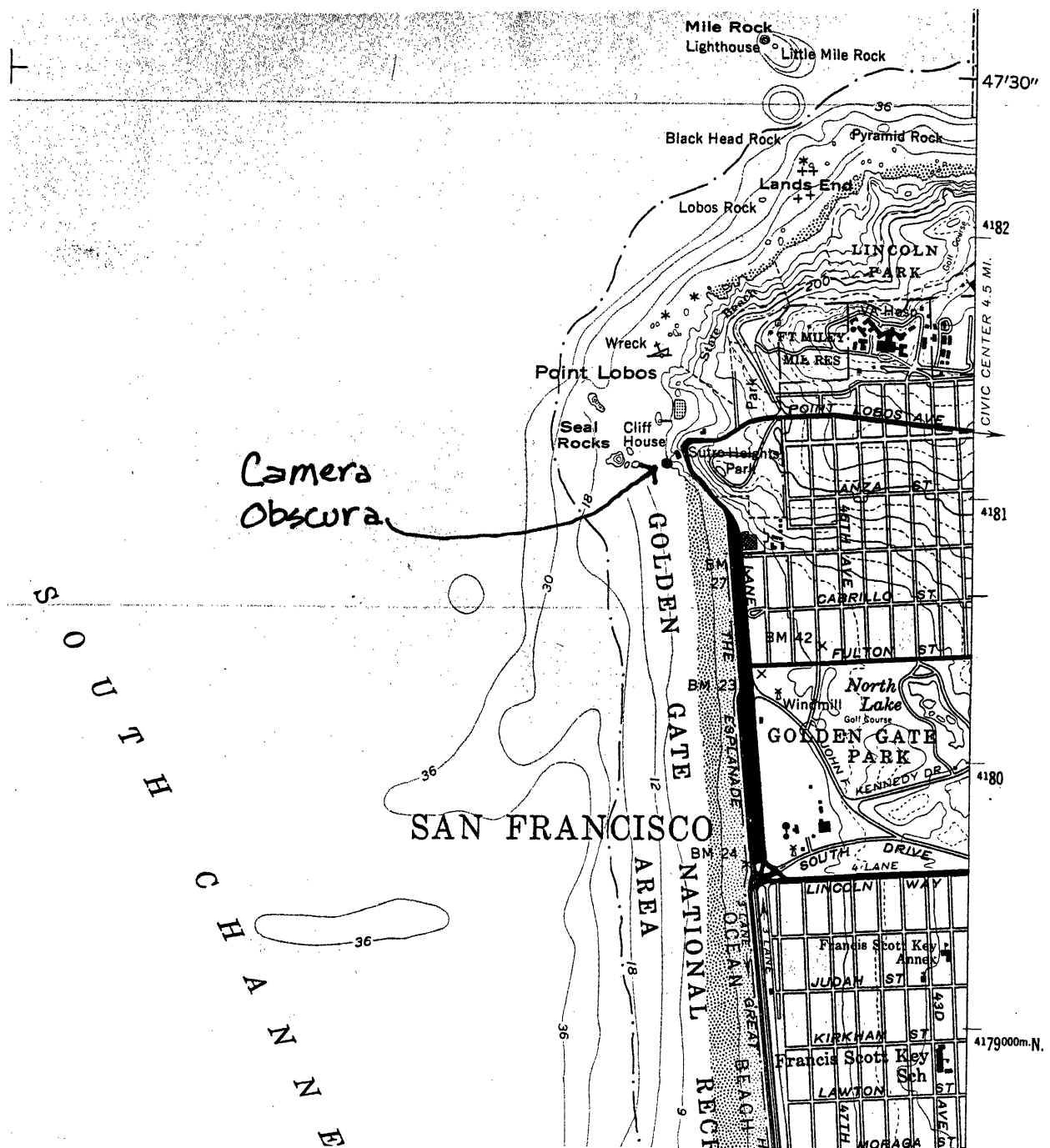
United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Geographic Map

Camera Obscura Page 18

Point Bonita, California USGS Quad. Photoinspected 1978. 1:24,000



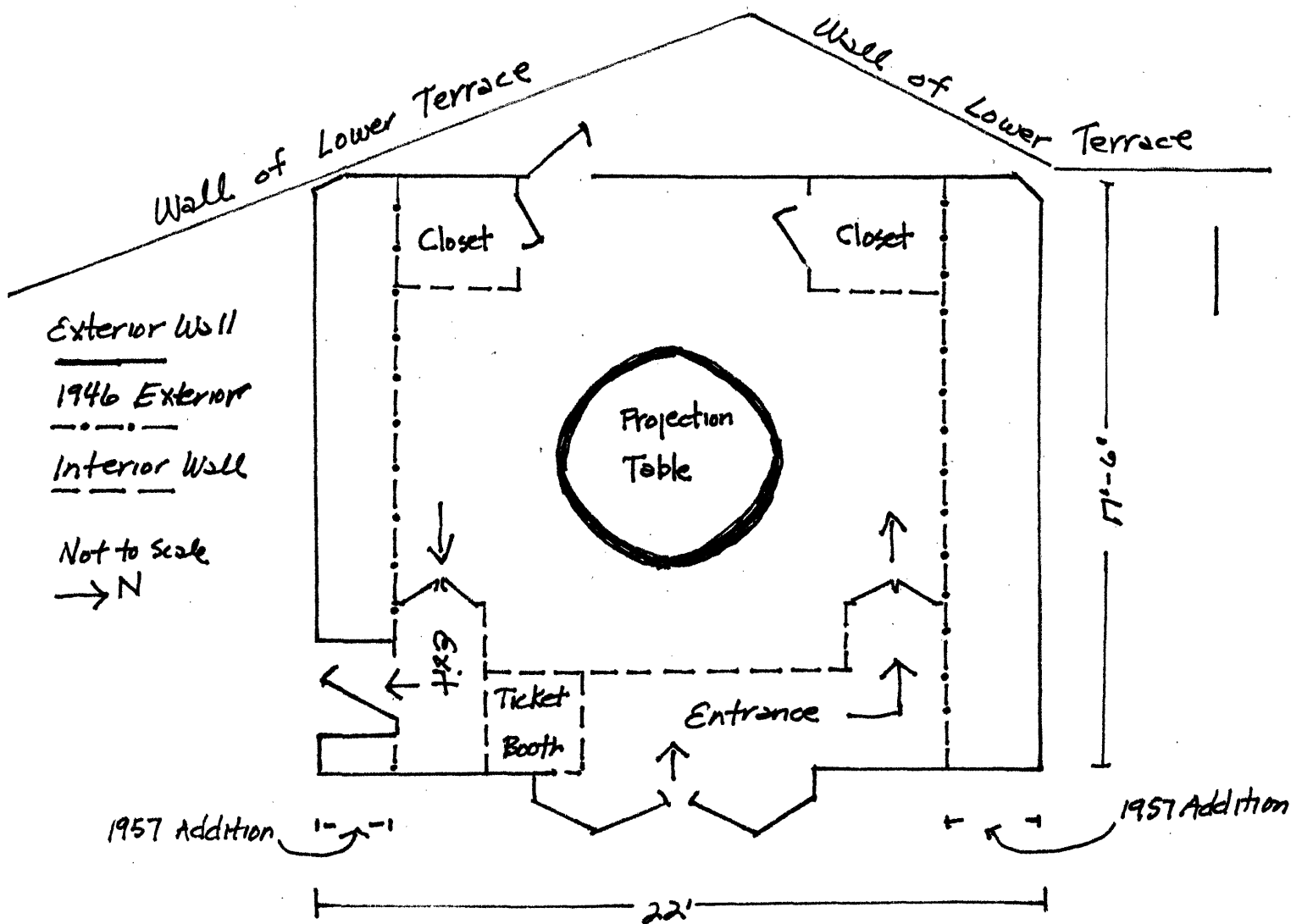
United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Sketch Map

Camera Obscura Page 19

Sketch Map of the Floor Plan of the Camera Obscura





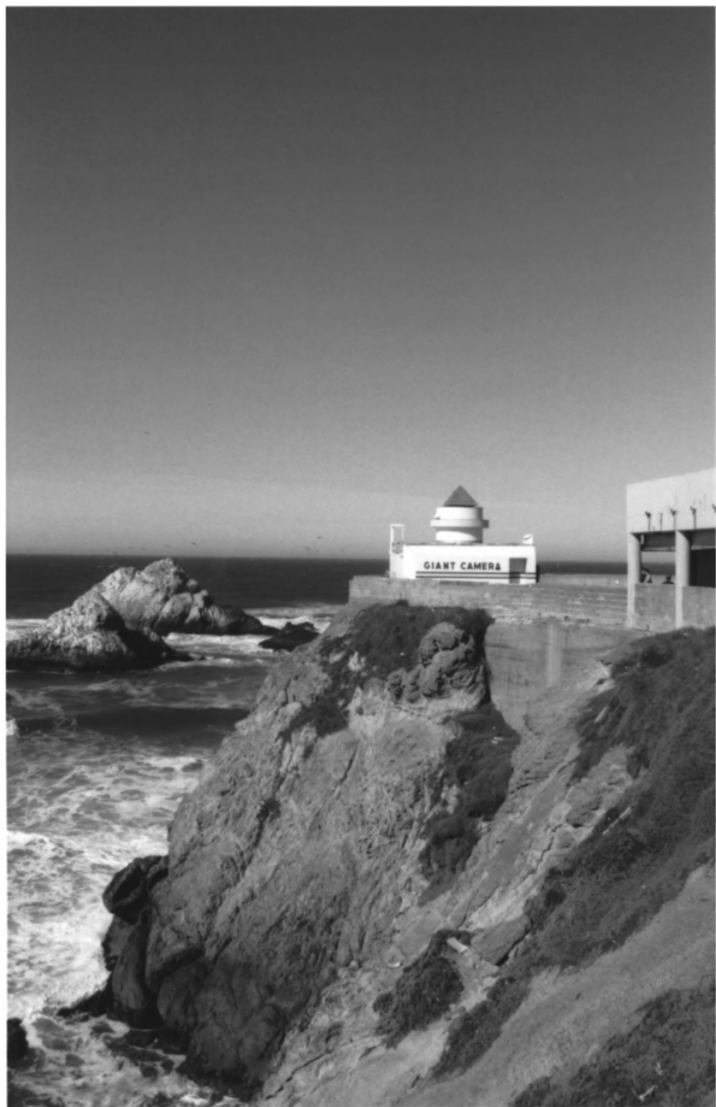
Camera Obscura, San Francisco, CA Photo 1 Neg 1



Cameras Obscura, San Francisco, CA Photo 2 Neg 15



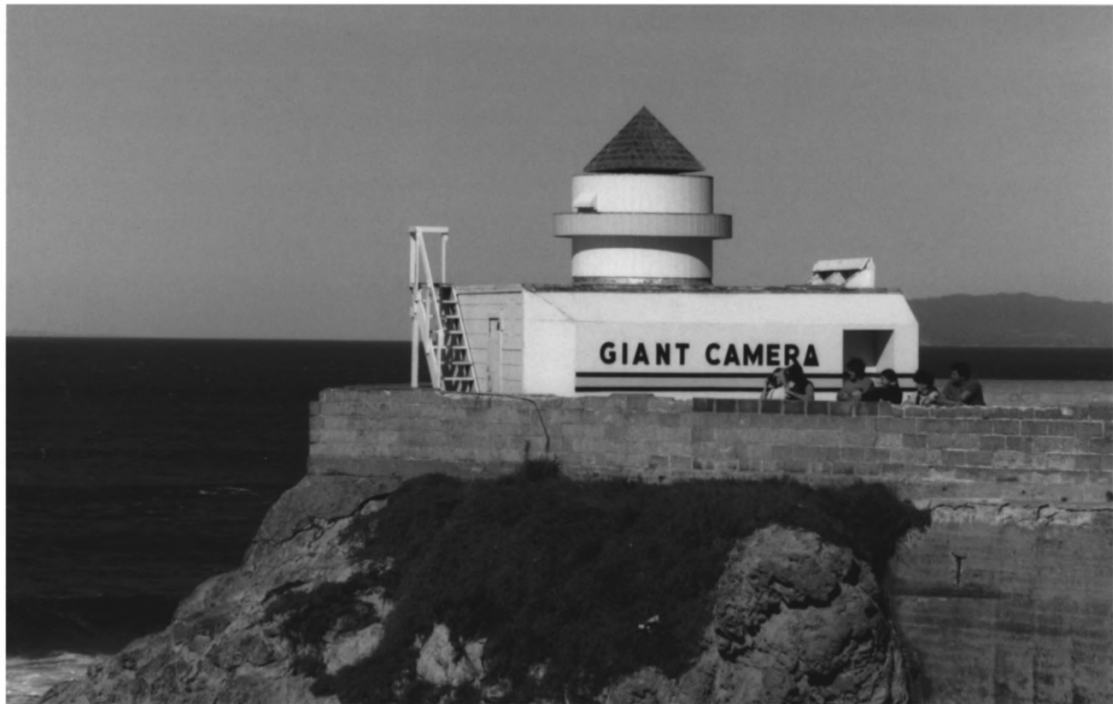
Camera Obscura, San Francisco Photo 3 Neg 17



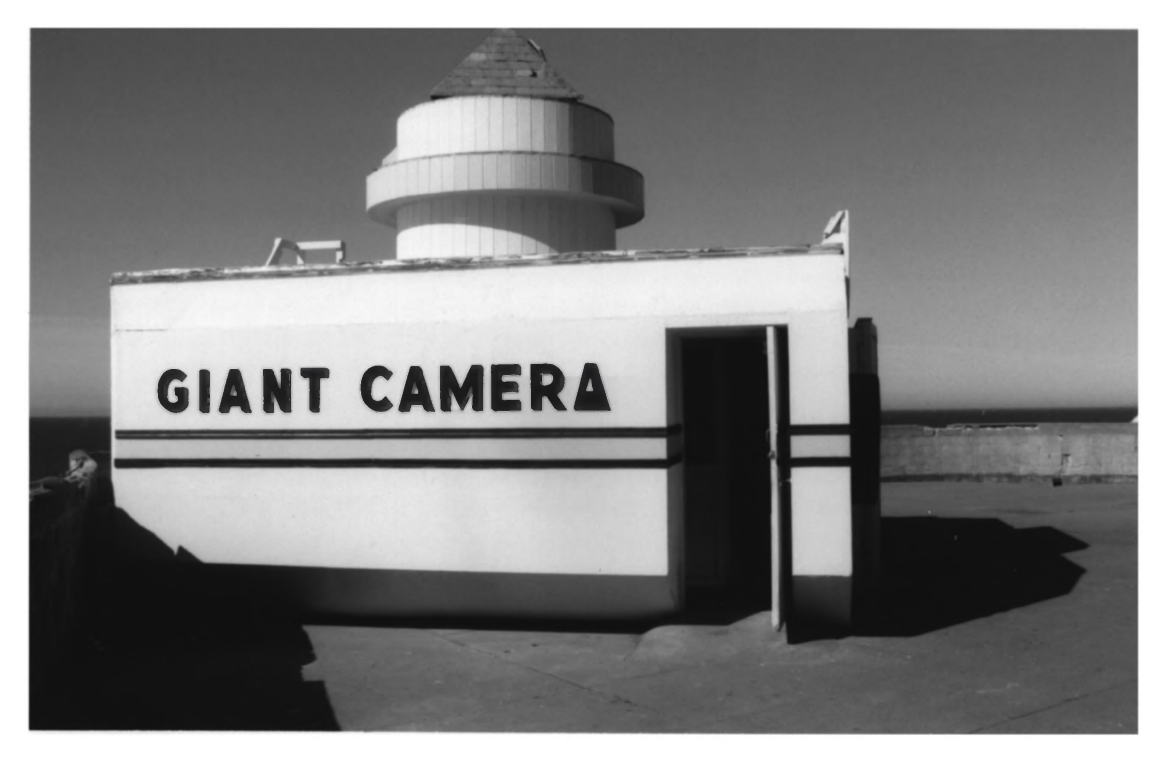
Camera Obscura, San Francisco, CA Photo 4 Neg 4



Camera Obscura, San Francisco, CA Photo 5 Neg 3



Camera Obscura, San Francisco, CA 1/1 - Photo 6 Neg 11



GIANT CAMERA

A black and white photograph of a building designed to look like a giant camera. The building is white with two dark horizontal stripes. On top of the building is a lighthouse-like structure with a conical roof. The words "GIANT CAMERA" are written in large, bold, black letters on the side of the building. The building is situated on a flat, open area, possibly a beach or a pier, with a clear sky in the background.

Camera Obscura

San Francisco CA

Photo 7

Neg 5



Camera Obscura, San Francisco, CA Photo 8 Neg 12



Camera Obscura, San Francisco, CA Photo 9 Neg 8



Camera Obscura, San Francisco, CA Photo 10 Neg 9

HOLOGRAM

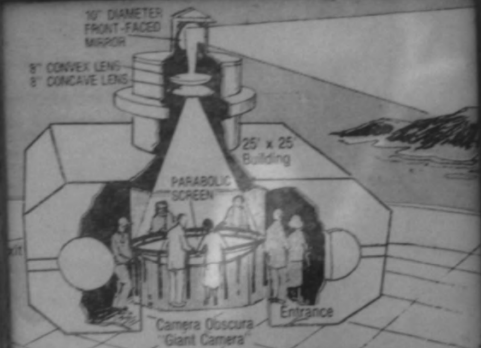
See the Seal of
Leonardo da

NOV
OPEN

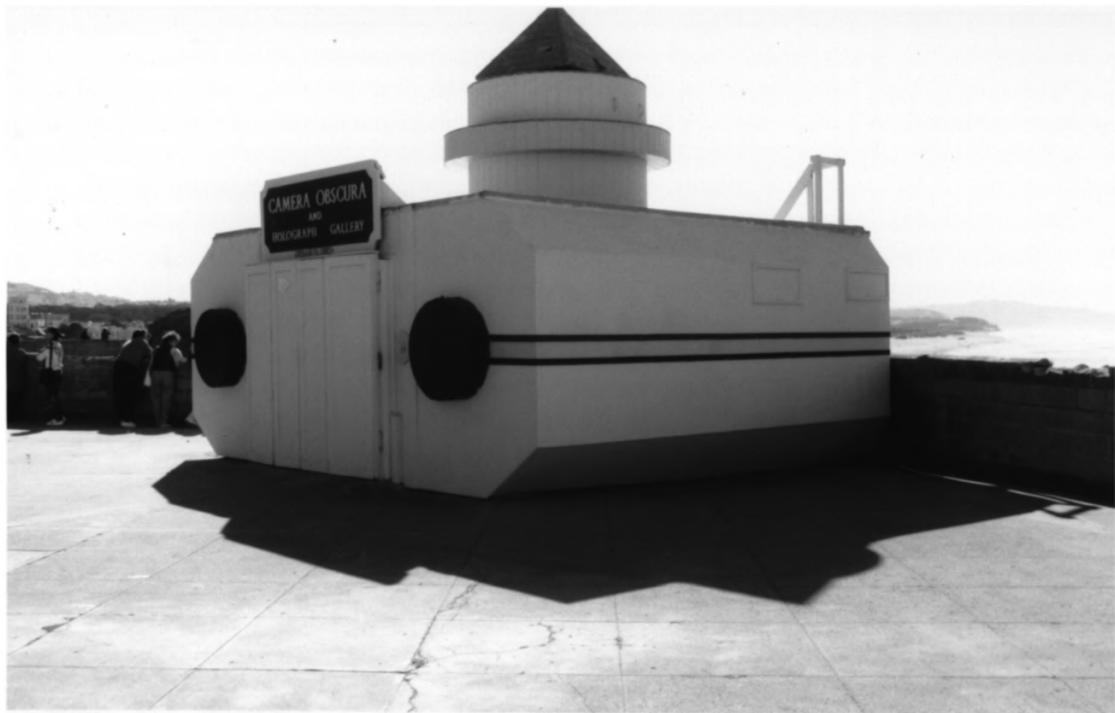


Camera Obscura, San Francisco, CA Photo 11 Neg 6

ONLY ONE
CELLAR FOR
THE
CAMERA
OBSCURA
EFFECT



Camera Obscura, San Francisco, CA Photo 12 Neg 7



Camera Obscura, San Francisco, CA Photo 13 Neg 14



CAMERA OBSCURA

**THIS IS THE
CAMERA
OBSCURA**

The latter screen has projected
the former and the latter
screen has projected the
Camera Obscura.

See the light. The light
and passing rays reflected
from the sky and projected
in their inverted and reduced
form on the latter's back
forming the image.

From the
CAMERA OBSCURA

**EXIT
KEEP CLEAR**

CAMERA OBSCURA

#14 CAMERA OSCURA

~~#106 50/50 Historic Camera District, San Francisco CA~~

EXIT



#15 CAMERA OSCURA

~~#107 Sotto Historic Lakeside District, San Francisco CA~~