Bloody Point Bar Light Station's National Register of Historic Places Nomination

==========

1. Name of Property

==========

historic name: Bloody Point Bar Light Station

other names/site number: QA-297

==========

2. Location

==========

street & number: N/A not for publication: N/A

city or town: near Clairborne. vicinity X

state: Maryland code: MD county: Queen Anne's code: 035

zip code: N/A

==========

3. State/Federal Agency Certification

==========

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this 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 does not meet the National Register Criteria. (___ See continuation sheet for additional comments.)

Captain, U. S. Coast Guard,

Chief, Office of Civil Engineering 2/22/02

Signature of certifying official Date

Department of Transportation, U.S. Coast Guard

State or Federal agency and bureau

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

_____ _____

Signature of commenting or other official Date

_____

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 Keeper Date of Action

==========

5. Classification

==========

Ownership of Property (Check as many boxes as apply)

___ private

___ public-local

___ public-State

X public-Federal

Category of Property (Check only one box)

building(s)

___ district

___ site

X structure

___ object

Number of Resources within Property

Contributing Noncontributing

_____ _____ buildings

_____ _____ sites

1 _____ structures

_____ _____ objects

1 0 Total

Number of contributing resources previously listed in the National Register 0

Name of related multiple property listing: Light Stations of the United States

==========

6. Function or Use

==========

Historic Functions (Enter categories from instructions)

Cat: transportation Sub: water-related

Current Functions (Enter categories from instructions)

Cat: transportation Sub: water-related

==========

7. Description

==========

Architectural Classification (Enter categories from instructions): No Style

Materials (Enter categories from instructions):

foundation: caisson

roof: metal

walls: metal

other:

Narrative Description (Describe the historic and current condition of the property.)

Description Summary

Bloody Point Bar Light Station rests on a wooden caisson which supports a round 30-foot-diameter cement-filled cast-iron cylinder painted red. Upon this cylinder rests a circular 37-foot-tall iron tower surmounted by a one-story decagonal iron lantern. As a caisson-type lighthouse, it is an integral station, i.e., the keeper's quarters, fuel storage areas, and lantern room are all part of the same structure. A lower gallery, originally covered by a roof that has been removed, surrounds the iron tower. The first two stories of the tower housed the keeper's quarters and the watch room. An upper gallery surrounds the lantern on top of the tower. The Bloody Point Bar Light Station is located in about seven feet of water at the edge of the shipping channel, east-southeast of Kent Point, Kent Island, Upper Chesapeake Bay, near Clairborne, Queen Anne's County, Maryland. Owned and managed by the U.S. Coast Guard in District 5, access to the lighthouse is via boat.

General Description1

Bloody Point Bar Lighthouse consists of a cast-iron shell tower containing the keeper's quarters and watchroom. The tower foundation is a wooden caisson surmounted by a concrete filled steel cylinder on which the light tower rests. Surmounted on the keeper's quarters is the original lantern with deck and railing. The interior of the superstructure is empty except for a single access ladder to the lantern. Many of the exterior features such as the lower gallery roof, stovepipe, and davits have been removed. The structure lists approximately two degrees toward the south. Boarding is by a single ladder on the east side of the cylinder. A stone submarine scour apron surrounds the light station with some stones visible at low tide.

Foundation

The foundation consists of a square wooden caisson resting on sand below the surface of the water. On it, a cast-iron-plate cylinder, 30-feet in diameter and 30-feet in height rises above the surface of the water. The cylinder is made up of curved cast-iron plates bolted together at integral flanges running both vertically and horizontally. The caisson is filled with sand and the cylinder filled with rock and concrete. A railing surrounds the gallery deck that surrounds the top of the cylinder. The gallery deck is constructed of

cast-in-place concrete with a broom finish. The surface of the concrete coincides with the top of the iron cylinder.

Boarding of the structure is by a single ladder made of flat bar stock rails and round rungs. The ladder has a rake outward from the side of the cylinder. A small landing is provided at the top of the run.

Tower, Exterior

The cast-iron tower shell, 37 feet tall, is made of iron plates. Fenestration consists of double sash windows set in pedimented cast-iron openings. The door is also set in a pedimented cast-iron opening. Along the upper tower where the watchroom is located, the windows consist of nautical porthole-type openings. Pervasive cracking of the iron plates characterizes the condition of the iron. The distress in the plates is the result of thermal stresses during a 1960 fire and corrosion between the integral flanges. Corrosion between the flanges near the outside plate face has caused tensile stressing of the flange/plate interface. The tensile stresses are high enough to cause the plates to rupture. Many of the cracks have been welded and others stitched with steel plates. The shell is in very poor condition, especially the bottom two tiers, with corrosion unabated at this time. The cylinder and tower leans approximately 1 foot in 30 feet, yet the gravitational stability of the structure is good. The original gallery roof attached to the exterior of the tower has been removed.

Tower, Interior

A fire consumed the timber frame interior of the structure leaving a cast-iron shell. The brick masonry lining three floors has been removed exposing the backs and flange connections of the caisson plates. Apparently, the interior of the first level or cellar was abandoned and filled with concrete.

Lantern

Access to the lantern is by a vertical steel ladder that extends from the first floor directly to the lantern deck. A safety cage has been installed from the top down to within 8 feet of the first floor. The lantern is a decagonal shaped cast-iron structure with a 32-foot-high parapet wall surmounted with structural mullions that frame the panes and support the roof. The panes fit into a groove in the sill and are held fast by astragals bolted to the mullions. The panes are well sealed with silicon at the mullions. The roof above the panels rises from a cove-shaped cast-iron cornice. A portion of the ventilator ball has been broken.

Access to the exterior deck is by a cast-iron, half-door which appears to be original. The cast-iron deck of the lantern is made of triangular segments forming a full circle, which cantilevers beyond the line of the tower and is supported from below on decorative cast-iron brackets. The lantern deck railing appears to be original. It consists of two, horizontal curved flat iron bars, top and bottom with e-inch-diameter balusters. The posts are 13-inch-square stock mounted on a half round lug that projects from the deck. Mounted on the south side of the lantern deck are two solar panels and a battery case. There is a foghorn at the northwest quadrant of the structure. The lamp is an incandescent bulb set in a 300mm acrylic lens.

Conclusion

Since Bloody Point Bar Light Station was severely damaged by fire in 1960, its interior integrity has been compromised. In addition, the exterior is in poor physical condition. Because of this lack of integrity, it is not eligible for listing in the National Register

==========

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)

X A Property is associated with events that have made a significant contribution to the broad patterns of our history.

____ B Property is associated with the lives of persons significant in our past.

X 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):

Maritime History

Transportation

Architecture

Period of Significance: 1882-1952

Significant Dates: 1882, 1960

Significant Person (Complete if Criterion B is marked above): N/A

Cultural Affiliation: N/A

Known Design Source: none

Architect/Builder: Thomas Evans

Narrative Statement of Significance (Explain the significance of the property.)

The Bloody Point Bar Light Station is significant for its association with federal governmental efforts to provide an integrated system of navigational aids and to provide for safe maritime transportation in the Chesapeake Bay, a major transportation corridor for commercial traffic from the early nineteenth through twentieth centuries. This station, located off the southern end of Kent Island, marked the Bloody Point Bar and the entrance to Eastern Bay. Its caisson construction embodies a distinctive design and method of construction that typified lighthouse construction on the upper Chesapeake Bay during the second half of the nineteenth and early twentieth century.

History

The U.S. Lighthouse Board received several petitions for the establishment of a lighthouse on Kent Island including Bloody Point Bar in 1868. The Lighthouse Board submitted to Congress the estimated cost for these lights. The same request was repeated in 1869. Congress first appropriated funds "for the erection of a lighthouse and fog-bell on Bloody Point Bar, Kent Island, Chesapeake Bay," in the amount of $25,000 on March 3, 1881. The plan chosen was a caisson with iron tower similar to Sharps Island Lighthouse. The contract to build the structure was awarded to Thomas Evans. The ironwork for the lighthouse was contracted by the same supplier as for Sharps Island Lighthouse. All the ironwork was completed for the lighthouse and work begun on June 5, 1882. By June 30 a wooden working platform was in place, and a derrick mast, concrete mixer, and engine placed upon it. Twenty-two piles were driven, and cap logs were set upon them, and a floor was laid of 6- by 12-inch timbers, on which the caisson was to be sunk. The outer piles projected above the inner piles and flooring "to allow the superimposed timbers to freely admit the first section of the caisson." The first section of cast-iron plates that formed the cylinder was then bolted together upon the flooring and lowered into position on the bottom. After the second tier of plates was bolted on, concrete and broken stone was then poured into the cylinder. On August 15, all the cast-iron plates had been bolted together, and the cylinder was filled with over 700 cubic yards of concrete.

By the end of August, the tower had been completed, the brick lining finished, the roof installed, and the upper sections of the temporary staging removed. Interior woodwork was completed, and all staging was removed by the end of the first week of September. The Bloody Point Bar Light, consisting of a fourth-order Fresnel lens, was first "exhibited" on October 1, 1882. J. Regester & Sons of Baltimore cast the fog bell for the station in 1882.3

Two years after completing the tower, a list of approximately 6 degrees developed. This listing developed after severe gales, on February 29 and March 3, 1884, caused scouring of the sand from under the northwest side of the structure. Riprap stone was placed along the northwest side of the cylinder but sounding determined it "disappeared or sunk." In November 1884, sand was dredged from underneath the high side in order to level the structure. This work was only partially successful, correcting only half the original list. During the spring of 1885, 760 tons of large stone was placed on top of heavy brush mattresses that projected out 30 feet around the structure to serve as a scour apron. No noticeable change in inclination was noticed during, or after, the laying of the stone. The water tank positions were changed so they would function correctly with the new listing of the structure.4

In 1899, the fog bell striking machine was upgraded, the copper smoke pipe renewed, inflow water pipes for the water tanks repaired, and doors and windows throughout repaired. In 1901, sounding was made around the lighthouse and "various repairs were made." Originally, a timber frame roof sheathed with cast iron covered the gallery. The exact time of erection and demolition of this gallery roof is not known. In 1948, the current keeper, Tom White, described the station as follows:

Inside, the lighthouse is made up of five rooms - one below the surface of the water - all with curving walls. The bottom room, reached by a steep metal ladder, is lined with shelves containing paint cans, heavy ropes, and extra pulleys. Two large tanks, each of 250 gallons capacity, are the light's reservoirs; rainwater piped from the roof is stored in them.

The first deck above the water line contains the central controls for the light - the bank of storage batteries that supplies power for the lamp and the other electrical appliances in the building. Nearby are the machinery that operates the foghorn and various lockers containing tools and storm gear.

On the first deck, too, is the room that serves as kitchen, parlor, dining room and radio shack. Here are the stove and refrigerator and heating equipment. Along one side of the wall are two radio sets, one a stand-by and one operating constantly, day and night, bringing the latest information on matters concerning navigation in the bay and rivers.5

On April 30, 1960, fire broke out in the tower when electrical wires connected to the light shorted out. Fire spread toward propane tanks. The two keepers on duty tried to fight the blaze, but the smoke was too much for them and they escaped in an outboard motor boat. Shortly afterwards, the propane tanks exploded. Nineteen-year-old assistant keeper Mark Mitchell (Mighall), later recalled, "The lighthouse had become a tower of flame. It was awful watching your station burn." The interior of the structure was completely gutted by the fire leaving only a cast-iron shell. The lens toppled into the blazing interior. A temporary bell buoy with flashing light was stationed next to the burnt out shell, and in the fall of 1961, a lamp and lens were installed and the station automated.6

==========

9. Major Bibliographical References

==========

"Chesapeake Bay Lighthouses," Gedell & Associates, Structural Engineers, Wilmington, Delaware, 1991.

Clifford, Candace. 1994 Inventory of Historic Light Stations. Department of Interior, National Park Service, History Division, Washington, D.C., 1994.

de Gast, Robert. The Lighthouses of the Chesapeake. The Johns Hopkins University Press, Baltimore and London, 1973.

Holland, F. Ross, Jr. Maryland Lighthouses of the Chesapeake Bay: An Illustrated History. Maryland Historical Trust, Crownsville, Maryland, in press.

Moberly, Elizabeth H. "Tom White's Lighthouse Out in the Chesapeake Can Be A Far Cry from the Place of Peace and Quiet You Might Suppose." The Baltimore Sun, October 31, 1948.

U.S. Lighthouse Board. Annual Reports, 1868-1901. Department of Commerce and Labor, Washington, D.C., 1868-1901.

Previous documentation on file (NPS)

___ preliminary determination of individual listing (36 CFR 67) has been requested.

___ previously listed in the National Register

X 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

X Federal agency

___ Local government

___ University

___ Other

Name of repository: National Archives; Library of Congress; National Maritime Initiative, National Park Service; U.S. Coast Guard Headquarter, Historian's Office, Washington, D.C.

==========

10. Geographical Data

==========

Acreage: Less than one acre

USGS quadrangle: None available for this section of Chesapeake Bay

UTM References: Zone Easting Northing

18 377536 4188235

Boundary Description:

The boundary is coterminous with the foundation of the lighthouse.

Boundary Justification:

The boundary completely encompasses the light station.

==========

11. Form Prepared By

==========

name/title: Ralph E. Eshelman, Maritime Historian

(Originally prepared for the Maryland Historical Trust as part of a multiple property nomination for Maryland Lighthouses; reformatted in May 1998 by Candace Clifford, NCSHPO consultant to the National Maritime Initiative, as part of a multiple property documentation form for U.S. Coast Guard-owned light stations; edited in August 2000 by Jennifer Perunko, NCSHPO consultant, National Maritime Initiative, National Park Service)

organization: Eshelman & Associates

date: February 25, 1996

street & number: 12178 Preston Dr.

city or town: Lusby state: MD zip code: 20657

telephone: 410-326-4877

==========

Property Owner

==========

name: U.S. Coast Guard, Fifth District

street & number: 431 Crawford Street

telephone: (757) 398-6351

city or town: Portsmouth state: VA zip code: 23705

Notes:

1 This section taken largely from "Chesapeake Bay Lighthouses," Gredell & Associates, Structural Engineers, Wilmington, Delaware, 1991.

3 Lighthouse Board, Annual Reports, 1868; 1869; 1882, p. 35; 1883, p. 50; and 1884, p. 48.

4 Lighthouse Board, Annual Report, 1885, p. 49.

5 Elizabeth H. Moberly, "Tom White's Lighthouse Out in the Chesapeake Can Be A Far Cry from the Place of Peace and Quiet You Might Suppose," The Baltimore Sun, October 31, 1948.

6 Lighthouse Board, Annual Reports, 1899, p. 102; and 1901, p. 108; "Chesapeake Bay Lighthouses," Gedell & Associates, 1991, p. 147; Robert de Gast, The Lighthouses of

the Chesapeake, The Johns Hopkins University Press, Baltimore, 1993, p. 123; "Blast Wrecks Bloody Point Light Station," Star (April 30), 1960, no page; "Blast and Fire in Lighthouse Injure Keeper: Bloody Point Facility Destroyed," Norfolk-Ledger-Dispatch (April 30), 1960, no page; and Candace Clifford, 1994 Inventory of Historic Light Stations, National Park Service, History Division, 1994, p. 123.

NPS Form 10-900 USDI/NPS NRHP Registration Form (Rev. 8-86) OMB No. 1024-0018

BLOODY POINT BAR LIGHT STATION Page 1

United States Department of the Interior, National Park Service National Register of Historic Places Registration Form