NFS Form 10-900	USDI/NPS N	NRHP Registration	Form (Rev.	8-86)	OMB No	o. 1024-0018
BALTIMORE LIGHT STATION						Page 1
United States Department of the Interior,	National Pa	ark Service	<u>Nationa</u>	al Register of Hist	oric Places Regist	tration Form

<pre>====================================</pre>		============
historic name: Baltimore Light St	ation	
other names/site number: AA-94	5 (2)	
2. Location		and other states and the states of the state
street & number: N/A	not for put	olication: N/A
city or town: near Gibson Island		vicinity X
state: Maryland code: MD	county: Anne Arundel	code: 003
zip code: N/A		
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As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this nomination and 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 the National Register Criteria. I recommend that this property be considered significant nationally. (\_\_See continuation sheet for additional comments.)

Tak 9/m Captain, U. S. Coast Guard,

Captain, U. S. Coast Guard, <u>Chief, Office of Civil Engineering</u> Signature of certifying official

2/22/02 Date

Department of Transportation, U.S. Coast Guard State or Federal agency and bureau

In my opinion, the property  $\underline{\times}$  meets \_\_\_\_\_ does not meet the National Register criteria. (\_\_\_\_\_\_ See continuation sheet for additional comments.)

<u>5-7-02</u> Date

Signature of commenting or other official

State or Federal agency and bureau

### **BALTIMORE LIGHT STATION**

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

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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 Regis	ter
other (explain):	
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Signature of Keeper	$\frac{12/2}{\text{Date of Action}}$
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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:	brick
other:	

Narrative Description (Describe the historic and current condition of the property.)<sup>1</sup>

Description Summary<sup>2</sup>

The Baltimore Light Station consists of a wooden caisson, which supports a round 30-footdiameter cement-filled cast-iron cylinder painted red upon which rests a brick 2 1/2-story 38foot-tall, octagonal-shaped, brick quarters painted white, with a mansard roof surmounted by a one-story black iron lantern. As is the case with caisson-type lighthouses, it is an integral station, i.e., the keeper's quarters, fuel storage areas, and lantern room are part of the same structure. The first two stories are masonry, and the upper 1/2-story is a wooden mansard roofed watch room. The combination dwelling and lantern have elements of the Second Empire architectural style.<sup>3</sup> The Baltimore Lighthouse is located in 24 to 29 feet of water on the western edge of the main ship channel at the mouth of the Magothy River marking the south entrance to Craighill Channel, northern Chesapeake Bay, near Gibson Island, Anne Arundel County, Maryland. Owned and managed by the U.S. Coast Guard in District 5, access to the lighthouse is via boat.

<sup>&</sup>lt;sup>1</sup> The following description and associated photographs were reviewed in August 2002 by a US Coast Guard Aid to Navigation team responsible for the property. A document verifying that the description and associated photographs reflect the current condition of the property is on file with the Office of Civil Engineering, US Coast Guard Headquarters, Washington, DC.

<sup>&</sup>lt;sup>2</sup> Much of this narrative is derived from a section of a condition assessment report on Baltimore Light Station prepared by the National Park Service's Historic Preservation Training Center in 1995/1996. This report is on file at the National Maritime Initiative office, National Register, History, and Education Programs, National Park Service, Washington, D.C.

<sup>&</sup>lt;sup>3</sup> F. Ross Holland, Jr., "Lighthouses" (draft text for National Historic Landmark Context Theme Study, 1993), p. 87.

### **General Description**

### Foundation

The foundation consists of a 48-foot-square wooden caisson resting on sand 82 feet below the surface of the water. On it, a cast-iron-plate cylinder 30 feet in diameter, rises to a height of 18 feet above the surface of the water. The top tier of plates flares out to form the lower gallery deck, which is covered by a cement slab. The caisson is filled with sand and the cylinder filled with rock and concrete. The plates are prefabricated; each plate containing Arabic and Roman numerals inscribed into an upper corner, which indicate plate and tier position. There are a total of 13 tiers.

A 42-inch-high rail surrounds the gallery deck; the top rail is 2 inches wide and 1 inch thick; the intermediate and bottom rails are 1 3/4 by 1/2-inch flat iron stock. The round balustrades are 2 inches in diameter with round 3/4-inch balusters and a central round baluster on each 90-inch section with a diameter of 1 inch. The balustrade finials are 3-inch-diameter balls, only two of which survive.

### Tower, Exterior

The brick tower is a 24 by 24 feet square with truncated corners making it octagonal in shape, with a mansard roof originally covered with a patterned color slate. The dwelling doors were originally painted brown with green shutters and window frames. The outside privy hangs over the gallery on the southwest side. It is made of cast-iron sections, which are bolted together. The shape is that of an octagon cut in half with a pyramid roof capped by a metal finial. The door and toilet seat are missing. A pair of boat davits once hung from both the east and west sides, but the east side pair has been removed. Landing ladders with platforms are located on the east and west side, accessed to the gallery deck via a metal grill hatch. There are also the footings for what appears to be a fog signal stand on the east side of the gallery deck. The davits and privy are painted black. At the top of the first level is a single corbeled brick belt, followed by two normal belts, and then two additional corbelled belts. At the top of the second level and just below the mansard roof are three corbelled belts. The brick is pressed brick with butter joints painted white.

Fenestration consists of an entrance door on the east and west side with a single window above on the second level. The door on the west side is made of 3-inch sheet iron. The door on the east side is cinder blocked over. There are double windows on the first and second levels of the north and south sides. All the windowsills and window and door lintels are made of cut granite. All the windows were originally six-over-six double-hung wooden sash windows, but these have been removed and replaced with louvered acrylic sheets. There is a dormer window on the north, south, east and west sides. The dormers were removed, probably in 1988, and rebuilt in 1992.

# Tower, Lower Level

The cellar has four rooms originally used for the storage of coal, oil, wood, and other provisions. This level is accessed by a wooden ship's ladder. The floor plan is identical to that of Point No Point Lighthouse. Portholes provided light and ventilation, but these are now sealed. Beneath this level is a cement-plastered 3,500-gallon cistern for water storage. There are two manhole covers, which provided access to the cistern. Piping from the gutter system supplied water. A hand pump in the kitchen was hooked up to the cistern. The oil room retains its original metal door. The doorframes to each room are made of cast iron. The roof is vaulted. A coal shoot from the gallery deck is located on the east side. A hollow metal central support column has a cut out door near the bottom where weights for the fog signal striking mechanism could be accessed.

### Tower, First Level, Interior

This floor is divided into two main rooms, consisting of a kitchen in the northwest sector and a sitting room employing the north half of this level. The entrance hall on the west has a stairway straight ahead, which leads up to the second level and down to the cellar. A larger storage room is located to the south of the west entrance hall. In the foyer of the east entrance is a wooden trap door for access to the cellar. A large metal hook hangs from the ceiling of the foyer to accommodate a pulley. The walls, ceiling, and stairwell are covered with beaded wood paneling, but this paneling on the exterior walls is water damaged and most of it removed. The windows and doors all have bulls-eye molding and matching trim. The molding and paneling is varnished. The central metal cylinder column is wood "grained" to match the wood interior. The kitchen retains its original porcelain sink sunk into a one-piece solid wood counter top with grooved drain board. The base of the hand pump is located to the right of the sink and is mounted on the counter top. The wooden floors are tongue-and-grove.

### Tower, Second Level, Interior

This floor is divided into two bedrooms, each with a closet, and a shared large double closet on the east side. Off the hall on the west side is a smaller room, probably used for storage. The central support column is wood "grained." The entire exterior wall paneling has been removed, while the interior walls, ceilings, and trim are identical to the first floor. All the doors are intact but the hardware is missing. The stairwell continues to the third floor.

# Tower, Third Level, Interior

The watch room is located on this half level. The original dormer windows, located on the north, east, south, and west sides, were removed sometime after automation. These were replaced following the original plans by the Coast Guard, Baltimore Group, during the summer of 1992. The walls and ceiling are covered with the same varnished beaded paneling as on the first and second levels. A 5-inch-diameter wooden column, also varnished, supports each corner. The metal central support column is also wood "grained." The fog bell was located outside the east dormer window. The counterclockwise stairwell continues to the lantern room but turns clockwise about two-thirds of the way up. The stairwell is varnished from top to bottom.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> 4 Wilton Hartig oral communication to Ralph Eshelman, USCG Facility, Curtis Bay, Baltimore, Maryland, February 9, 1995.

### Lantern

The original proposed design for the lantern as indicated by drawings, dated December 1895, from the National Archives (see copy with photographs) called for a lantern set on a half-story brick tower offset to one side from the roof of the second story of the keeper's quarters. This design was changed to the present design where the lantern is centered above the half-story third level. The lantern is octagonal in shape. A lightning spindle surmounts it with a ground wire running down to the "underside pinnacle on water closet," which is made of cast iron. The parapet walls are wooden covered with sheet metal on the outside and vertical beaded paneling on the inside. The lantern is painted black on the outside and the paneling white on the inside. The glass panes are set in cast-iron frames painted black. There are three ventilators set in the parapet walls but the regulators are missing. The ceiling of the lantern is covered with sheet metal; there is no smoke funnel. The lens is a 250mm acrylic lens, serial number 90521, with a red sector. It is powered by a single solar panel mounted on the upper gallery rail on the south side. The original lens pedestal is still being used.

The upper gallery deck is made of flat seam sheet metal, painted black. The gallery rail is made from 2-inch-diameter posts capped with 3-inch-diameter finial balls. The upper, intermediate, and bottom rail are made of 2-inch-wide, 1/2-inch-thick flat iron bar stock with no pickets. Access to the gallery is via a wooden half door, which is covered with sheet metal. The original hardware is intact except for the inside handle.

### Conclusion

The dormers in the mansard roof were taken off when a new roof was installed and then later replaced by the Coast Guard. Deck fittings, such as boat davits around the lower gallery, have largely been removed. Much of the interior paneling on the exterior walls has been removed due to water damage. Original sash windows and exterior doors have been removed. Otherwise, the station maintains a high degree of historic integrity.

#### 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)

<u>X</u> 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.
<u>x</u> 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
- X 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: 1908-1964

Significant Dates: 1908, 1923, 1964

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

Cultural Affiliation: N/A

Known Design Source: none

Builder: William H. Flaherty and Frederick Martin Lande of Brooklyn, New York; and U.S. Fidelity & Guaranty Co. for the U.S. Lighthouse Board

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

Baltimore 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. Of the eleven pneumatic caisson lighthouses built in the United States, seven were built in the Chesapeake Bay; three were built in the Virginia portion of Chesapeake Bay (Wolf Trap Lighthouse, 1894, Smith Point Lighthouse, 1897, and Thimble Shoal Lighthouse, 1914) and four in the Maryland portion of Chesapeake Bay (Solomons Lump Lighthouse, 1895, Hooper Island Lighthouse, 1902, Point No Point Lighthouse, 1905, and Baltimore Lighthouse, 1908).<sup>5</sup> In 1964, Baltimore Light Station became the first and only nuclear powered lighthouse in the United States and the site of a strontium-90 fuel cell test. It was the largest wooden caisson built in the United States, perhaps in the world, when built, and it was the deepest caisson to be sunk in the United States.

# History

The construction of the Baltimore Lighthouse represented the final component in the system of aids to assist the mariner in navigating the channels reaching Baltimore's Harbor. The Lighthouse Board first requested a light for this locality in 1890. The annual report states:

The principal difficulty in the navigation of the New Cut-off Channel occurs at its junctions with the Craighill and Brewerton Channels. At these places the channel has been widened, and intention is to still further increase the width. For vessels of small draught there is no difficulty in entering or leaving Baltimore Harbor. It is only in the day-time, when it is difficult to distinguish the buoys which mark the turning-points, and for large steamers, that additional aids to navigation are needed. A lighthouse is most wanted at the mouth of the New Cut-off Channel, i.e., where this channel joins the Craighill. On account of the impressible character of the shoal, and the liability to destruction or damage by fields of moving ice, no lighthouse, other than an expensive one, can be made permanent. The estimated cost of a suitable structure is \$60,000, and an appropriation of this amount is recommended therefor.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> U.S. Lighthouse Service 1915 (Washington D.C., Government Printing Office 1916), p. 28; Lawrence H. Bradner, The Plum Beach Light: The Birth, Life, and Death of a lighthouse (1988), p. 169; Clifford p. 165 and 173 indicates Alpena Lighthouse and Fourteen Foot Shoal Lighthouse are also pneumatic, but this is apparently incorrect. Bradner gives a date of 1902 for Point No Point Lighthouse while de Gast p. 63 and Clifford p. 130 give a date of 1905.

<sup>&</sup>lt;sup>6</sup> U.S. Lighthouse Board, Annual Report, 1890, (Washington, Government Printing Office, 1890).

In 1895, borings made at the selected site found a layer of soft mud 55 feet thick below the surface. This discovery along with a contemplated change in the entrance to the Craighill Channel in 1896 necessitated a reevaluation of cost and deliberation on a better site for the light station. When Congress appropriated only \$60,000 on August 18, 1894, it was decided to use a screw pile type foundation lighthouse, but a "disk pile" test conducted in 1898 proved discouraging. The Lighthouse Board Annual Report for 1899 reports, "It is now evident that the expense of building a light-station in the 55 feet of semi-fluid mud which overlaps the sandy bottom will be great." Congress was requested to appropriate another \$60,000 in 1900 for a more expensive caisson type lighthouse, which would have to resist winds of 100 miles per hour, ice pressure of 30,000 pounds per square foot, and a current of three miles per hour. The Lighthouse Board felt the lighthouse should be built by the pneumatic system of construction. This request and a new caisson design for the lighthouse was accepted on June 10, 1902, but only one bid was submitted, and it was \$80,000 over the allocated \$120,000. The bid was rejected and the contract re-advertised. Congress appropriated another \$60,000 to complete the project on April 28, 1904.<sup>7</sup>

In early 1904, William H. Flaherty and Frederick Martin Lande of Brooklyn, New York, were the sole bidders. They had experience building other caisson lighthouses having built Romers Shoal (1898), New York Harbor, New York; Rockland Lake (1894), Hudson River, New York; Plum Beach (1899), Rhode Island; Solomons Lump (1895), Maryland, and Smith Point (1897), Virginia.<sup>8</sup> Through negotiation, Flaherty and Lande were able to get their contract price lowered to within the budget. They were allowed to use large stones in the concrete, finish the cellar without brickwork, and reduce the number of bolts and use different timbers in the caisson. Atlanta Machine Works of Atlanta, Georgia, won the contract to supply the metal work. By August 9, 1904, twelve courses of the caisson were assembled and launched at the Lazaretto Lighthouse Depot, Baltimore. Then eight more timber courses were added. Two tiers of iron plate for the cylinder were attached and the assembly towed to the site. A Baltimore newspaper stated the following prophetic words:

The erecting of this big lighthouse will be one of the most difficult tasks ever undertaken by lighthouse builders. Not only that the site is in an exposed place, where the seas have a long sweep and the ice in winter rushes down the Bay with terrific force, but from the surface of the water the engineers will have to go down nearly 86 feet before they will reach a firm resting-place for the foundation. The water at the site is 23 feet deep. Then comes a stratum of 55 feet of mud, soft and fluid on top, but increasing in firmness as the depth increases, and underlaid by a stratum of coarse sand four feet thick, below which is a layer of fine sand. In this fine sand the bottom of the lighthouse will be planted.

<sup>&</sup>lt;sup>7</sup> Lighthouse Board, Annual Report, 1897, p. 98; 1898, p. 107; 1899, p. 108; 1900, p. 97; 1901, p. 45; 1904; Holland, Maryland Lighthouses of the Chesapeake Bay: An Illustrated History (Crownsville, MD: Maryland Historic Trust, 1997), pp. 90-101; and Robert de Gast, Lighthouses of Chesapeake Bay (Baltimore: Johns Hopkins University Press, 1973), p. 87.

<sup>&</sup>lt;sup>8</sup> "Great Caisson for Lighthouse," Baltimore American (June 28, 1904).

In order to reach this depth, which is the greatest ever attempted in lighthouse construction, it is necessary to use a caisson and working chamber in which men can go down and prepare the foundation. To withstand the awful pressure of the water, the caisson or working chamber, of wood, is a remarkable structure.

It is 48 feet square and 23 feet high, the first seven feet of height forming the frustrum of a square pyramid. This structure is built of gigantic timbers, the smallest of which are 12 feet long and 12 inches by 12 inches, while the largest are 48 feet long and 24 inches by 12 inches. In order to get these later timbers, it was necessary to search the Georgia woods for suitable trees, and the cost of them delivered was way out of proportion to the smaller sticks.

# Million Feet of Lumber

The timbers are laid lengthwise and across in alternate layers, and each course, as the layers are called, is securely bolted and spiked, caulked and pitched, In the walls more than 600,000 feet of lumber are used, while in the roof are 500,000 feet, making a total of 1,100,000 feet of lumber used in the working chamber alone.

To keep this mass of timber together 26,000 spikes and bolts ranging in length from 21 inches to 90 inches, have been used...<sup>9</sup>

The estimated weight of the working chamber was 972 tons. Flaherty and Lande said that "if they get but two calm days they will not worry." They planned to use about 60 men, called "sand hogs," to work one to three hour shifts depending on depth, night and day, to remove the debris from the caisson bottom so the foundation would sink to the desired depth. Flaherty and Lande also said they anticipated no great difficulty in placing the caisson on the bottom.<sup>10</sup>

The assembly was sunk on September 19, 1904, on top of 91 wooden piles previously driven into the muddy bottom. Within two days the assembly had sunk into the mud eight feet when on September 21, "heavy seas filled the cylinder" and the caisson settled to one side about seven feet out of level. On October 12, during a "severe storm," the caisson completely turned "flat on its side" despite attempts to level it by placing concrete on the inside of the high side. Flaherty ceased operation implying he would return in the spring. It was reported in the Baltimore newspapers that, "the erecting of this lighthouse is conceded to be one of the most difficult undertakings that lighthouse builders have attempted."<sup>11</sup>

<sup>&</sup>lt;sup>9</sup> "Great Caisson for Lighthouse," *Baltimore American* (June 28, 1904). An undated building plan from the National Archives (see copy with photographs) for Baltimore Lighthouse called for a 32-foot square caisson, not a 48-foot square caisson as this article indicates.

<sup>&</sup>lt;sup>10</sup> "Great Caisson for Lighthouse," *Baltimore American* (June 28, 1904).

<sup>&</sup>lt;sup>11</sup> Lighthouse Board, Annual Report, 1904, p. 79, and 1905, p. 81; Holland, Maryland Lighthouses of the Chesapeake Bay: An Illustrated History, pp. 90-101; and Baltimore American, October 31, 1904, in Baltimore Light file, National Archives, Washington, D.C. and copy in Baltimore Light file, National Maritime Initiative Office, National Park Service, Washington, D.C.

By spring, Flaherty had defaulted on his contract, and was sued by the U.S. Government. The insurance company, which had bonded the contractor, United States Fidelity and Guaranty Company, spent the next three years trying to right the caisson using counterbalancing methods in an attempt to recover some of its monies. They began by removing 62 of the 120 iron plates and erected a U-shaped pier around the assembly to support a steam engine, hoisting machine, ten A-frames, and temporary housing. On June 30, 1907, they succeeded in righting the caisson using 80 tons of large stones placed on the high side, and heavy weights suspended from wire cable secured to the caisson and passed over the A-frames, all while pumping mud from underneath one side. By November 20, 1906, the assembly was within 17 degrees of vertical. Work commenced again the following spring by replacing the third and fourth tiers of iron plates and placing 80 tons of stone on the high side of the caisson and pumping mud from under the low side. Then the fifth and sixth tiers were added and approximately another 100 tons of stone placed on the caisson. This method was continued until the assembly was vertical and the cylinder filled with stone and concrete. Upon completion, the caisson was sunk 82 feet below the water level. The brick dwelling and lantern were then built, and the lighthouse was commissioned with the lighting of a fourth-order lens on October 1, 1908. Baltimore Lighthouse was the last lighthouse built in the Chesapeake Bay, completed 28 years after it was first requested. It was the largest wooden lighthouse caisson built in the United States and perhaps in the world up to that time.<sup>12</sup>

Baltimore Lighthouse was outfitted with a fog bell signal when first built, but it was replaced with a foghorn sometime before 1923. In preparation for automation, the illuminant was changed from oil to acetylene and the clock-operated fog signal discontinued and was replaced by a fog bell Buoy 6C on May 1, 1923. The operational and maintenance duties were turned over to the keepers at nearby Sandy Point Shoal Lighthouse.<sup>13</sup> The keeper at Baltimore Lighthouse was transferred to Point No Point Lighthouse where its old keeper was transferred to be the new second assistant keeper at Sandy Point; the assistant keeper at Baltimore Lighthouse transferred to Seven Foot Knoll Lighthouse. Interestingly, the keeper who transferred to Sandy Point Shoal Lighthouse had the same last name, Midgett, as a keeper already stationed there.<sup>14</sup>

In May of 1964, the Coast Guard experimented with lighting lighthouses using nuclear power. The chosen test site was Baltimore Lighthouse. A 4,600-pound SNAP-7B Strontium-90 powered 60-watt isotopic fuel cell generator was installed by crane from a Coast Guard buoy tender and passed through the east doorway on a trolley platform. The atomic powered generator, smaller than a 55-gallon drum, was housed in an especially constructed heavy steel box. The test ran for a year and upon completion, the nuclear equipment was removed and

<sup>&</sup>lt;sup>12</sup> Lighthouse Board, Annual Report, 1906, p. 67; 1907, pp. 76-77; and 1908, p.19; "Great Caisson for Lighthouse," Baltimore American (June 28, 1904); Holland, Maryland Lighthouses of the Chesapeake Bay: An Illustrated History, pp. 90-101; and de Gast, p. 87.

<sup>&</sup>lt;sup>13</sup> Candace Clifford, 1994 Inventory of Historic Light Stations (Washington, D.C.: Government Printing Office, 1994), p. 123; Lighthouse Board, Annual Report, 1923, pp. 33-34; and Holland (1993), p. 59.

<sup>&</sup>lt;sup>14</sup> Holland, Maryland Lighthouses of the Chesapeake Bay: An Illustrated History, p. 90-101.

nuclear power has not been attempted since. A Geiger counter test detected no nuclear contamination.<sup>15</sup>

About 1983, the windows were bricked over, and a steel door and frame were installed to keep out vandals. The glass panes were replaced by acrylic panels, which had yellowed. These were replaced by safety glass in 1990. The blocked-up windows were opened, the gallery "restored," and the roof flashing repaired by USCGC Red Birch in 1990 to improve air circulation and bring the lighthouse closer to its original physical appearance. The 300mm acrylic lens was replaced with a 250mm acrylic lens.<sup>16</sup>

9. Major Bibliographical References

Bartlett, Bill. "Coast Guard races time to preserve bay lighthouses," Annapolis Capital, August 4, 1990.

Bradner, Lawrence H. The Plum Beach Light: The Birth, Life, and Death of a lighthouse, 1988.

- 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.

"Great Caisson for Lighthouse," *Baltimore American*, June 28, 1904.

Holland, F. Ross, Jr. Lighthouses, Part of the Maritime Heritage of the United States National Historic Landmark Theme Context Study, National Maritime Initiative, National Park Service, Washington, D.C., 1993.

*Maryland Lighthouses of the Chesapeake Bay: An Illustrated History*. Maryland Historical Trust, Crownsville, Maryland, in press.

U.S. Lighthouse Board. Annual Reports, 1890-1923. Department of Commerce and Labor, Washington, D.C., 1890-1923.

<sup>&</sup>lt;sup>15</sup> Holland (1993), p. 62; Holland, Maryland Lighthouses of the Chesapeake Bay: An Illustrated History, p. 90-101; and Milton Hartig oral communication to Ralph Eshelman, Curtis Bay, Baltimore, February 9, 1995. See also New York Times (1963), January 22, 9:2 and November 19, 82:5

<sup>&</sup>lt;sup>16</sup> Bill Bartlett, "Coast Guard races time to preserve bay lighthouses," Annapolis Capital (August 4, 1990).

United States Department of the Interior, National Park Service

- Previous documentation on file (NPS) preliminary determination of individual listing (36 CFR 67) has been requested.
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey #
- recorded by Historic American Engineering Record #

Primary Location of Additional Data

- X State Historic Preservation Office
- Other State agency
- X Federal agency
- Local government
- University
- Other

NPS Form 10-900

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. United States Department of the Interior, National Park Service

10. Geographical Data

Acreage of Property: Less than one acre

USGS quadrangle: Gibson Island, MD

**UTM References:** Northing Zone Easting 378950 4324068 18

**Boundary Description:** 

The boundary is conterminous with the caisson foundation of the light station.

**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 and revised in August 2002 by Jennifer Perunko, NCSHPO Consultant, National Maritime Initiative, National Park Service)

organization: Eshelman & Associates

date: March 13, 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: Federal Building, 431 Crawford Street

city or town: Portsmouth

state: Virginia

zip code: 23705-5004

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